

AMERICAN RAILROAD JOURNAL.

STEAM NAVIGATION, COMMERCE, MINING, MANUFACTURES.

HENRY V. POOR, Editor.

ESTABLISHED 1831.

PUBLISHED WEEKLY, AT No. 136 NASSAU ST., NEW YORK, AT FIVE DOLLARS PER ANNUM IN ADVANCE.

SECOND QUARTO SERIES, VOL. VIII, No. 13]

SATURDAY, MARCH 27, 1852

[WHOLE NO. 832, VOL. XXV.]

PUBLISHED BY J. H. SCHULTZ & CO., 136 NASSAU ST.

PRINCIPAL CONTENTS.

James River and Kanawha Co.....	193
Kock Island and Chicago Railroad.....	195
Columbus and Xenia Railroad.....	196
Cleveland and Pittsburg Railroad.....	196
Travel on the Lakes.....	198
Ohio County Bonds.....	198
Massachusetts Railroad Statistics.....	198
Syracuse and Binghamton Railroad.....	199
Raleigh and Gaston Railroad.....	199
Galena and Chicago Railroad.....	199
Roanoke Valley Railroad.....	199
Ohio and Indiana Railroad.....	200
Duryee, Forsyth & Co's Scales.....	200
Stock and Money Market.....	200
Railroad Law in Tennessee.....	202
Eaton and Hamilton Railroad.....	203
Railroad between Lake Michigan and the Gulf of Mexico.....	204
Memphis and Charleston Railroad.....	204
Cumberland Valley Railroad.....	205
Hillsboro' Railroad.....	205
Ohio and Pennsylvania Railroad.....	205

Hudson and Berkshire, 2·3 cents, with the same omission as above.

Hudson River railroad, 4 cents, with the same omission as above.

Northern railroad, 4·3 cents, with the same omission as above.

Oswego and Syracuse, 2·4 cents, with the same omission as above.

Utica and Schenectady, 1·8 cents, with the same omission as above.*

New York and New Haven, 3·1 cents, with the same omission as above.

Tonawanda, 4 cents, cost of iron omitted.

GEORGIA.

Georgia, 2·218 cents.

VIRGINIA.

Petersburg railroad, 3·7 cents on plate rail 2½"; 2·62 cents on edge rail.

By an examination of the table it will be observed that the cost of transportation per ton per mile varies between the extremes of 1·14 cents and 4·3 cents, and that the average cost is 2·58 cents.

In speaking of railroad transportation as a general proposition, which extreme shall we take? Or shall we take the mean? I shall take neither, for neither would be correct as an assignable quantity, nor would any figure in such a sense be reliable. I can say this much, however, that the table does not sustain the proposition stated in the report of the committee of stockholders: "That the experience of our country has pretty well established the fact, that the cost of railroad transportation does not exceed one cent per ton per mile on well constructed railroads." And I will here take occasion to say, that so far as my inquiries extend, (and they have been carried into every quarter of the country where railroads are to be found) there is not a railroad in the country, unless it may be the Reading railroad, whose transportation does not exceed a cent per ton per mile; and in Massachusetts it is on the increase. I have before me a letter from a friend, an engineer of distinction in that state, who says: "I find that many, if not all of those who have charge of our railroads, put the cost of transporting freight much higher than they need to. They find it necessary to allow much more for depreciation of stock of all kinds, including road, cars, stations, etc., etc., than they did formerly."

Now in deciding upon and selecting from the table a rate which will be applicable to the portage railroad from Covington to the Ohio, care must be taken to select that road which bears the nearest

resemblance to it. I am unable to find one which corresponds in grade or in any leading feature. Mr. Jonathan Knight, in his review of the report of the chief engineer of the Baltimore and Ohio railroad, dated December 13th, 1845, says that a charge of four cents per ton per mile would be low upon a railroad crossing the Allegheny.

In the first annual report of the Lynchburg and Tennessee railroad company, now the Virginia and Tennessee railroad company, which contains the memorial of the stockholders to the general assembly, the president's report, and the reports and estimates of the engineers, all setting forth the advantages and benefits to result from the construction of the road to induce a subscription on the part of the State, (see house document No. 3, session 1848-9) will be found the following paragraph, p. 21, on the subject of the increase of the value of lands by cheapening transportation:

"By it the least valuable agricultural products will pay their transit expenses to an eastern market, and yield liberal profit to the farmer in addition; and thus will those lands, now of little value, be sought after and cultivated to an extent scarcely to be estimated at this time." For instance: "By reference to the reports of the following railroad companies, to wit: the Boston and Lowell, Boston and Providence, Boston and Worcester, Eastern, Georgia and Baltimore and Ohio, it will be seen that the average charge per ton per mile for freight is 4 cents and 9 mills." And these rates of freight were looked to on the Virginia and Tennessee railroad as the means of accomplishing and bringing about the promised benefits of the road to the people, (which, to a great extent, I have no doubt will be realised,) coupled with the opinion that "the travel, such as the world has not seen, will pass over the road."

By an examination of tables A, 1, 2, and 3, here-to annexed, it will be seen that the average rate for transporting freight per ton per mile on seven northern railroads, for the full distance, is 2·70 cents; for half distance, 3·65 cents; for the full and half distance combined, 3·17 cents.* That the averages

* The rates on the northern railroads are generally considered below remunerative prices, as will appear from the following extracts from the proceedings of the convention of the northern lines of railway held at Boston in December, 1850 and January, 1851. In that convention, on the resolution "That it is expedient to raise the price for transportation both of passengers and freight"—

"Mr. Whittemore, of the Vermont and Massachusetts railroad, said that, so far as concerned the railroads commencing fifty miles or more from Boston, they must either raise their rates on freight and passengers, or do something else to obtain an income, or else they must die. It was well known that the rates on freight throughout the country, traversed by railroads, were very much less now than before they were built; less than the roads

American Railroad Journal.

Saturday, March 27, 1852.

James River and Kanawha Canal.

Continued from Page 180,

COST OF TRANSPORTATION.

Actual Cost (approximately) per ton per mile of Transporting Freight on the following Railroads in 1850.

MASSACHUSETTS.

Western.....	1·561 cents.
Boston and Worcester*.....	1·720
Boston and Maine.....	2·558
Fitchburg (repairs of road not kept up sufficiently).....	1·140
Boston and Providence.....	2·206
Boston and Lowell.....	2·531
Old Colony.....	2·967

NEW YORK.

Albany and Schenectady, 4 cents, exclusive of cost of iron, repairs of road, depreciation of engines and machinery, depreciation of freight cars, and depreciation of passenger cars.

Auburn and Rochester, 1 cent and 8 mills, with the same omission as above.

* The cost of transporting freight per ton per mile on the Boston and Worcester railroad, for the year ending November 30th, 1851, was 2·1 cents. See the 22d annual report of the president of the company. And the cost of transportation on other roads has also increased, as I am informed.

* Exclusive of canal tolls, which I have estimated at 1 cent per ton per mile. The cost, including canal tolls, would be 2·8 cents per ton per mile.

I would here observe that all railroad companies in New York are now exempt, by law, from the payment of the canal toll.

on the Baltimore and Ohio railroad are respectively as above for the length, half length, and length and half length combined, 2 85, 3 43, 3 39; and for eleven southern railroads the averages on the like principle are 4 34, 5 65 and 4 99 cents. With this weight of authority before me, I could not, if my judgment and experience were in conflict with it, place the charge price for freight on the railroad from Covington to the Ohio less than four cents per ton per mile.

The next question is, what portion of this should

could afford to receive, and much less than the freight could afford to pay. Change was not so much needed as to roads terminating in Boston, as in regard to those in the remote country towns; but it was clear to him that, at the present prices, the distant roads must, as a class, be ruined. The result of such a change might be thought uncertain; but without such change there could be no dividends. He was in hopes that it would be one effect of the present convention to declare the existing rates on freight to be far too low. Doubtless the newspapers always will advocate 'low' freights and low fares, and these might do well enough for roads near Boston. Some roads could afford a different policy from others. It was well known that fares had been recently raised on the Fitchburg road, and he had heard little complaint; he thought this a safe precedent. He would vote for a rise, even should odium follow. It was time to inform the public that railroad business could not be done at the present prices. * * * * * Something must be done for the suffering roads. He could speak for one road, on which the prices paid for a very large department of business did not give a 'living.' Roads terminating in Boston, like the Lowell, and Fitchburg, could do business on lower terms than interior roads. * * * Directors, presidents, the press, and of course the public, were all in favor of low, lower, lowest. It was hard to say who began this, but it was clear where it would end, namely, in the ruin of railroad business. It was time to stop; but how should we begin? The winter was a good time to begin, and a great blessing to railroads, shutting up water communication, and giving some profits on transportation for at least a third of the year. We ought to take advantage of this."

"Mr. Fairbanks, of the Connecticut and Passumpsic Rivers railroad, supposed the resolution only intended to elicit discussion. The two questions, as to freight and passengers, should be separately considered. Passengers might so increase in numbers under low fares as to avoid loss. Not so with freights. Some freights would decrease in amount if prices were raised, but most would be but little affected. With certain competing roads—roads competing with water-communication—there might be difficulty; freight might be lost at too high a rate. But in local districts, without such competition, where there was a certain amount of products to go to market, and a certain amount of articles to go from the city for consumption, there would be no loss by a rate decidedly higher than the present, provided it were lower than the price paid before railroads were introduced."

"Mr. Thompson said that on the Sullivan railroad they were literally doing business for nothing. He was for changing the rates with reference to freight and not to passengers. Freight rates should be increased and very considerably."

"Judge Follett, of the Rutland and Burlington railroad, thought the tariff might be revised in regard to many towns on the roads. In establishing the rates for through freight, it was understood that towns on the road should have their freight carried at proportionate rates; and he instanced Ludlow as a point where there might be a revision in prices, and many other towns might pay more. Local freight paid about five cents a mile generally."

Since the first publication of this report I am in receipt of the proceedings of the annual meeting of the Vermont and Massachusetts railroad company, held on the 11th February, 1852, in which "Mr. Whittemore, the president of the company, gave it as his settled conviction that the railroads of New England must combine to raise the prices on all the roads in order to save themselves. If the prices were just doubled, the interior railroads would pay the stockholders about six per cent."

be charged to cost? In my judgment, it would not be safe to place on the side of expenditure a less sum than 2½ cents per ton per mile. By referring back to the quotations from the report of the engineer of the State of New York, it will be noticed, he says, that on the Baltimore and Ohio railroad "their ordinary traffic cost them over 2½ cents per ton per mile." My own judgment is, from a comparison of the cost of transportation on other roads, with all the circumstances which influences that cost, that 2½ cents per ton per mile cannot be considered as much out of the way.

The account would then stand thus:

Receipts for transporting one ton from Covington to the Ohio, 228 miles, omitting fractions, at 4 cents per mile.....	\$9 12
Expenditure at the rate of 2½ cents per ton per mile.....	5 70

I shall now pass from this subject for the present, and give some facts in relation to canal transportation.

The cost of transportation on a canal is made up of two items: that of *freight* paid to the carrier, and that of *toll* paid to the company for the use of its work.

On the 78th page of a report on the Chesapeake and Ohio canal, made by William H. Swift, president of the Western railroad, Massachusetts, and Nathan Hale, president of the Boston and Worcester railroad, (which report was drawn up at the request of Thomas W. Ward, Esq., agent for the Messrs. Baring, Brothers & Co., of London,) a detailed estimate of the actual cost of transportation on that canal will be found prepared by Mr. Fisk, the chief engineer of the canal. The result of which is, that "the actual cost of transporting a ton of coal from Cumberland to Georgetown, exclusive of tolls, will be 78·8 cents, which for the distance between the two places, 184·4 miles, is a small fraction over 4½ mills per ton per mile." This estimate is made under the supposition that the boat will be only loaded one way; that is, that there will be no back loading, and that the captain is not the owner of the boat. Mr. Fisk estimates "the cost to the canal company from the carriage of a ton of coal over its work at 5 cents." This would make the actual cost of transportation 86·6 cents, including *freight* and *toll*.

Allowing \$1 per ton between Cumberland and Georgetown, 184·4 miles, would give a profit to the carrier of nearly 27½ per cent, after providing for the perpetuation of the boats, mules, interest on capital, investment, etc.*

* Assuming that the year of navigation will be 300 days, that animal power will be used, as at present, for the tracking of boats, (for which purpose mules are considered on this canal preferable in every respect to horses,) that the average rate of travelling, including the time consumed in passing locks, will be 30 miles per day, that 17 round trips will be made each year, and that there will be no return load, and I estimate as follows:

First cost of a boat and its fixtures 1,000 00

Add for the time required for repairs, which may generally be made during that portion of the year when the navigation is suspended, but for which notwithstanding I will allow one-tenth; in other words, that 11 boats are required to keep 10 running.....	100 00
	1,100 00

First cost of 3 mules.....

240 00	
Add for occasional lost time from accidents, etc., one-tenth; in other words, say 11 mules are required to keep 10 at work...	24 00
	264 00

\$1,364 00

The interest on this sum per annum is... The depreciation of boats and mules, assuming that they will last (taking into consideration the occasional loss of a mule) 10 years, will be per annum.... The annual repairs of the boat and fixtures including the additional one-tenth, say

The charge for toll is at the discretion of the company, within the limits prescribed by the charter, and is always in proportion to the amount of tonnage, and that is materially affected by the length of the line. For the rates of toll on the Ohio, Pennsylvania and New York canals, I beg leave to refer to table B, hereto appended, taken from the report of the committee of stockholders; the *actual cost* of transportation on the several canals being, as I am informed, from 3½ to 4½ mills per ton per mile, and the charges from 5 to 8 mills per ton per mile.

The actual cost of transportation on the Erie canal, that is the present canal, is 3½ mills per ton per mile; the cost on the enlarged canal will be 2 mills per ton per mile. (See Charles S. Olmstead's report, page 44, rep. of the state engineer on the canals of the state of New York before referred to.) The rates of freight and toll combined on the Erie canal in 1850, were 1·56 per ton per mile, making the total charges \$6,484,545. (See state engineer's report, p. 15.) Of this amount, the state received for tolls \$2,918,771, and the remainder, went to the carriers. Page 14, same report, estimates the toll and freight on the enlarged canal at 7 mills per ton per mile, viz: 3 mills for toll and 4 mills for freight. The tolls, it is estimated, will amount to \$3,000,000, or more than 10 per cent on the cost of the canal, and the rate of freight amply remunerates the carrier.* On canals, local circumstances affect general results, though not in the same degree as on railroads. Relative results, and not absolute, are to be considered on the one as well as on the other. But canals have the advantage over railroads in this: that with the exception of the wooden structures, such as the lock-

8 per cent on their first cost.....	88 00
The cost of feeding and shoeing the mules, and other expenses attending them and their harness, say \$80 each; to which add one-tenth for the reason above given, making \$88, which for 3 mules, amounts to.....	264 00
Wages of a captain per month.....	18 00
Wages of a bowsman and towboy.	18 00
Board of the three per month.....	18 00
	54 00

Which for 10 months amounts to.....	540 00
Tow ropes, snubbing and other ropes per annum.....	40 00
Tools and fixtures for unloading.....	50 00
Extra expenses, beyond those provided for in other items, for loading and unloading, say per trip \$8, and for 17 trips...	136 00
Total cost per annum.....	\$1,336 24

"As 1,700 tons will be taken down in 17 trips, (the number assumed for the year's work), the actual cost by this estimate of transporting a ton of coal from Cumberland to Georgetown, exclusive of tolls, will be 78 6; which for the distance between the two places, 184·4 miles, is a small fraction over 4½ mills per ton per mile.

"If the price charged by the carrier for *freight*, exclusive of tolls, from Cumberland to Georgetown, should be \$1, the amount received for a year's work would be \$1700; deduct the actual cost, as estimated above, and there is left \$363 76 for the year's profit per boat."

* To show that even the present rates of toll on the James River and Kanawha canal do not compare unfavorably with the charges on the Baltimore and Ohio railroad and on the several railroads of Virginia, I annex a table marked C. An examination of this table will show that four of the eleven articles selected for comparison are carried cheaper on the canal than on the Baltimore and Ohio railroad, and that ten out of the eleven are transported cheaper on the canal than on the Virginia railroads, and that there is a marked difference in favor of the canal; for instance, on the canal, toll and freight on grain is 3·64 per ton per mile, on the Virginia railroads the rate of freight is 6·67 cents. The canal toll and freight on flour is 3·15 cents per ton per mile, and on the Virginia railroads the rate of freight is 5·81 cents per ton per mile.

gates, which require to be renewed about every ten years, and the timber dams, which last from 50 to 100 years,* they may in general terms be considered as imperishable; while the superstructure of a railroad, which costs from \$4,000 to \$6,000 per mile for a single track, is every day depreciating, and requires renewal sooner or later, according to amount of business, temperature, soil, etc. I shall, under another head, dwell more particularly on the relative advantages of a canal and railroad as a portage from Covington to the Ohio, and will therefore proceed at once, as I have done in the case of the portage railroad, to submit an estimate of the actual cost and charges on the water line from Covington to the Ohio. The line, it must be borne in mind, will consist of a mixed improvement of canal, lock and dam from Covington to the mouth of the Greenbrier, thence to the Ohio lock and dam for steamboat navigation.

The estimate will then be as follows:

ACTUAL COST.	
From Covington to the mouth of the Greenbrier, 83 miles, freight per ton per mile 4½ mills.....	37·35 cents.
From the mouth of Greenbrier to the mouth of the Kanawha, 156 miles, by steam tugs, 2 mills per ton per mile.....	31·20
Cost to the canal company for the whole distance	8
Total.....	76·55 cents.

RATES OF FREIGHT AND TOLLS.	
From Covington to the mouth of the Greenbrier river, 83 miles, freight per ton per mile 7 mills, which would yield a profit to the carrier.....	58·6 cents.
Tolls per ton per mile 6 mills.....	49·8
From the mouth of Greenbrier to the mouth of the Kanawha, 156 miles, freight per ton per mile 3½ mills....	54·6
Tolls per ton per mile 3 mills.....	46·8
Total.....	\$2 09·8

So it appears that the charges for toll and freight on the canal would be \$3 60·2 less than the *actual cost* of railroad transportation; and that the freight would be \$7 02·2 more by railroad transportation than canal transportation, exclusive of transhipment. I leave these pregnant facts without comment for your consideration and reflection. I think they demonstrate that the ability of the James river and Kanawha company to maintain a permanent low rate of tolls, depends on the completion of their line to the Ohio by an unbroken water line.

I proceed to remark on the adaptation of the improvement to the peculiar and most pressing wants of the state; of its capacity to transport the heavy and bulky products constituting the wealth of the mountain region; of its tendency to promote the opening of the western forests, and their settlement with farms, and manufactoryes, and villages, and towns; of its capacity to draw to our own the trade and commerce of other states; and though last, not least, of the prospect of its yielding a satisfactory revenue with a reduced rate of toll.

Having shown that the canal is the cheapest mode of transportation, no farther argument is needed to prove that it possesses all the prerequisites of an improvement to minister to the wants of the state. It is the only description of improvement that can advantageously transport the heavy and bulky products of the farm, the mines and the forest, and consequently conduce to the wealth of the state. I have shown in former reports that we can in no other way than by the extension of the water line to the Ohio enter into the competition with other states for the trade of the west, by which

* Twenty-seventh annual report of the board of public works, pages 573, 574, it is stated by Capt. C. Crozet, in his report on the "examination of the Upper Appomattox," that the dam at Venable's mills "has existed 60 years, without ever being rebuilt." "The Stony Point dam has existed 70 years." "The Clementown dam has been in existence ever since 1734, that is 108 years," (up to the date of the report.) "No better evidence could be adduced of the permanency of such works and navigation."

alone we can give value to the investment of the stockholders, and build up a considerable market in our state. But there is one view I have not yet taken, which I will now present: that is, the inadequacy of a portage railroad to supply the canal, provided it were worked up to its full capacity.

In the report of the state engineer of New York, which I have heretofore so largely quoted from, on the 13th page, there will be found the following statement, which is so applicable to the case before me, that I beg leave to transcribe it. Nothing could be more apposite. The engineer says:

"In order more fully to impress upon the mind the present magnitude of the canal trade and the capacity of the canal when enlarged, let us imagine its business transferred to a railroad.

"The tons arriving at tidewater last year were 2,033,863, all performed in the space of 226 days. A railroad operated six days in the week will have 313 working days in the year. If the above business should be divided equally throughout the year, then the arrival at tide water would be 6,498 tons daily; average loads of 100 tons of freight per train would require the arrival daily of 65 trains, equal to one train *every twenty-two minutes throughout the twenty-four hours*. A railroad performing a large passenger and fast freight business, and having a double track, with usual turnouts, could not, I suppose, perform one sixth of the above, as *additional business*, by slow trains, even admitting that the variation of trade at different seasons of the year could, by increased loads, be accommodated by the number of trains stated. In other words, it would require six double track railroads, having other traffic from which to earn dividends, to perform the business of the Erie canal during the past year, and some eight or ten for the business which the enlargement can command. The above business would require an outfit of at least 10,000 cars and 400 engines, costing, say \$9,000,000; and if confined to one road would require the daily arrival of 4½ miles of trains to be unloaded, loaded, and sent back, supposing that each train and *each car* should be fully loaded.

"All the railroads now built and in *process of construction* to connect Baltimore, Philadelphia, New York and Boston with the west, would be overburthened with business, if freights equal in amount to that of the Erie canal should be thrown upon them."

The capacity of the James river and Kanawha canal is equal to the passage of 2,929,680 tons per year, allowing ten minutes for the passage of a lock, 313 working days, and 65 tons to the boat, which is 895,817 tons more than reached tide-water on the Erie canal in 1850. Now, with a capacity equal to the performance of six double track railroads, "requiring other traffic from which to earn dividends" is it wise policy to limit and contract the power and capacity of the line by the substitution of a railroad that will cost more than the canal for a single track, and when provided with a double track can only furnish one-sixth of the tonnage which the canal can bear? Let every man who has any regard for the true interests of the State ponder this question well. The great state of New York, whose prosperity and growth are almost without a parallel in history, with a market which one would suppose would defy competition, with a canal pouring into her lap 2,633,863 tons per annum, with two lines of railroads to the lakes, became alarmed for her "emporium." The railroad corporations contended they could rescue her from the impending danger of losing her commerce and trade; the struggle was long and violent; the legislative department of the government was broken up. The people (and it is one of the most striking illustrations of the advantages of a popular form of government,) took the matter in hand; they discussed, they deliberated among themselves; they knew, without the aid of engineers and politicians, what was best for them. They were told that the improvement was superannuated—that the progress of the age called for the young locomotive, and not "whip-striped mules." But the works were before them; they "saw with their own eyes;" their advantages had been brought home to every man's door, for to them they were indebted for exemption from taxation; they saw how intimately their prosperity was connected with "cheap transportation; they saw that whatever would reduce the cost in

one portion would reduce it in another. The question was not local, but equally important to the northern, the central and the southern portions of the commonwealth." They saw rival lines springing up to rob their great highway to the west.—They saw the grandeur of their great city, the market of the continent fading before their eyes. Seeing, they believed; and in the middle of this nineteenth century, the most enlightened of the world, they subscribed (as it were) in their sovereign capacity at the polls \$9,000,000 to enlarge a canal.—How infinitely stronger are the arguments in favor of building a canal, especially in a state like ours, which is drooping in every department of industry, and can never otherwise be revived!

I do not deny the advantages of railroads. Those who have read my former reports to the company will recollect that I have always disclaimed the idea of an attack on railroads generally, or the impression that I advocate the canal policy to the exclusion of railroads under all circumstances. It would indeed be strange if I should be opposed to railroads, when I am connected with two lines in the chain between the north and south, making in their aggregate length 380 miles. On these lines, if canals were practicable, I should decide in favor of railroads; there they are in their appropriate sphere. But when I have before me the choice of a railroad or water line to command the trade of the west, superadded also to the necessity of building up a market in Virginia, in opposition to rival works leading to established markets in other states, I cannot hesitate which to choose. I am forced to give my preference in favor of the canal; every argument, every fact, every motive of expediency and policy is in favor of it; and especially that it will enable the company to do a far larger business and at less cost to the people. As to the question of the relative cost of the two plans, which even for a single railway happens to be in favor of a canal, I consider it one of minor importance. The canal has been shown to be equal to six double track railroads. If the result of the question of cost were reversed, and the canal were to cost six times as much as a railway, even without the condition that the railroads would require other business to maintain them, my views would be in favor of the water line. Because I am sure it would be promotive of the best interests of the state, that it would enable us to build up a market, that it would ensure our commercial and political power, and that it combines greater advantages than any other improvement that can be devised with a view to develop the resources and accommodate the trade of western Virginia.

So much, gentlemen, for matters *strictly* professional, and which I have endeavored to discuss with as much brevity as their very intricate nature and important bearing upon the interests of your company would warrant.

I repeat, that my experience for twenty-five years in the construction and management of railroads has not led me to depreciate their capabilities.—Divested of all professional or personal prejudices or bias in favor of one mode of improvement over another, I have zealously and unremittingly urged the completion of your canal as *the work of the state*, and (indeed next to the Erie canal) as *the work of the age*. Such are my convictions, [sustained by the present distinguished engineer of the state of New York,] and that others should reach opposite conclusions, and conscientiously too, I can readily believe; but "error ceases to be dangerous when reason is left free to combat it."

I am gentlemen, very respectfully,
Your obedient servant,
WALTER Gwynn,
Chief Engineer J. R. and K. Co.

Illinois.

Rock Island and Chicago Railroad.—The work on this road, from Chicago to Peru, a distance of one hundred miles, is under contract, and it is intended to have this portion of the road completed by the close of navigation. At Peru the road will connect with steam navigation on the Illinois river, thus opening a steamboat and railroad route from St. Louis to Chicago.

Ohio.

Columbus and Xenia Railroad.—The second annual report of the Columbus and Xenia railroad presents the following general statement of the operations of the company for the past year:

The income of the road for the past year exhibits as was anticipated, a large increase over corresponding periods of the previous year, as will be seen by referring to the following statement of gross earnings, exclusive of mail service, for each month, from the opening of the road to December 31, 1851.

Receipts in 1850. Receipts in 1851.

January	\$8,648 58
February	8,287 78
March.....	\$5,929 68
April.....	5,785 39
May.....	6,317 46
June.....	6,452 75
July.....	5,782 77
August.....	4,665 42
September	6,870 78
October.....	9,126 83
November	6,359 83
December	7,755 15

Totals for 10 mos. \$65,046 08 \$181,145 53

The sudden and great increase in the business and productiveness of the road, is mainly attributable to the completion of the Cleveland, Columbus and Cincinnati railroad from Columbus to Cleveland, opening, as it did, a direct communication between the lake and the Ohio river, and between the two great commercial emporiums of the State. The Columbus and Xenia road was opened late in February, 1850, and the Cleveland, Columbus and Cincinnati road was opened the last of February, 1851.

A final settlement has been made with the Little Miami railroad company, of the account of that company against the Columbus and Xenia railroad company, for constructing so much of the Columbus and Xenia road as is within the county of Greene; and a balance of \$25,000 found due to the Little Miami railroad company, payable in the stock of the Columbus and Xenia company, drawing dividends from Nov. 1, 1850.

The first dividend was made on the first day of July, 1851, of 5 per cent—out of the net earnings of the preceding 8 months; and the second, of 6 per cent, on the first day of January, 1852—out of the net earnings of the preceding 6 months. These dividends were both made payable in the capital stock—leaving the earnings of the road to be applied to the various cash wants of the company, and thus avoiding the alternative of borrowing money at a high rate of interest, or selling bonds at a large discount.

In order to simplify and render more intelligible a statement of the earnings of the road, and the charges thereon since the time when it was deemed expedient to commence making dividends, the report includes in the accounts of receipts and disbursements for the year 1851, those of the months of November and December, 1850—making in all 14 months:

The gross earnings of the road for the year 1851, as stated in the report of the superintendent, were \$211,631 37
Do. for November and December, '50 14,376 24

Total for 14 months 226,007 61

Running expenses for '51 69,952 03

Do. for November and December, 1850, say 6,000 00

Total running expenses 75,952 03

Net earnings from November 1, 1850, to January 1, 1852 150,055 58

Chargeable with interest 41,800 00

July dividend, 5 per cent on stock 30,488 50

January dividend, 6 per cent on stock 40,631 31

112,919 81

Balance surplus fund \$37,135 77

From the foregoing statement, it appears that the

earnings of the road for 14 months, ending December 31, 1851, were sufficient—after defraying running expenses and all other ordinary expenses of the company, cost of repairs of the road and equipments, interest to bondholders and other creditors of the company—to pay dividends to the amount of 11 per cent to stockholders, and leave a surplus to balance depreciation and provide for contingencies, of \$37,135 77.

The total cost of the road and its appurtenances and equipments, on the 1st day of January, 1852, as evidenced by the amount of capital stock for which the stockholders had received, or were entitled to receive, certificates; debts due to bondholders and to other creditors for temporary loans, was \$1,194,073 80.

Which is balanced by the following items:

Capital stock including amount due the Little Miami railroad company as hereinbefore stated, and to stockholders on account of dividends	\$721,719 81
Mortgage bonds paying 7 per cent interest	300,000 00
Outstanding income bonds, same interest	75,100 00
Bills payable—temporary loans	97,253 89

Total \$1,194,073 70

In addition to this are several parcels of real estate, not necessary for depot purposes or roadway, and other assets, amounting in all to \$29,289 93 which may be considered as an investment of so much of the surplus fund available for the improvement of the road, or for renewing such portions of it as are subject to destruction or decay.

The Xenia and Columbus and Little Miami roads are now worked on joint account, and the net profits divided in the ratio of capital.

We have no doubt that for many years to come, the entire line from Cleveland to Cincinnati, will pay at least 10, and probably 12 per cent per annum. This must carry the stock to a high figure, as well as the bonds, for conversion. The average value of eastern railroad stocks paying 10 per cent, ranges from 125 to 130, and we can see no reason why equally valuable Ohio stocks should not go to the same figure.

Travel between Albany and Buffalo.

Summer Arrangements of the Central Railroads.

There will be seven or eight daily trains from this city, during the coming season. The following is the programme.

LEAVE ALBANY.

Leave Albany.	Arrive at Buffalo.
A. M. 6. Express, through in 12½ hours .. . 7 P. M.	
" 7½ Lake Erie Express, in 12½ " .. . 8 "	
" 9. Mail " in 18 " .. . 3 A. M.	
" 11. Express, through in 12½ " .. . 11½ P. M.	
P. M. 2. Accommodation to Syracuse, where it unites with another train to Buffalo.	
" 4. Express—falls into 7. P. M. Train at Syracuse.	
" 7. Night Express through in 13 hrs. 8 A. M.	

FREIGHT.

A. M. 8. Way freight to Syracuse.	
P. M. 1. Emigrant and through freight.	
" 6. Through freight.	

LEAVE BUFFALO.

Leave Buffalo.	Arrive at Albany.
A. M. 5. Express through in 12½ hours 5.30 P. M.	
" 7. do. 12½ " .. . 7.30 "	
" 7½ Accommodation from Syracuse 3 00 "	
" 8. Express from Buffalo, 12½ hours 8.30 "	
" 10. Mail 18 " .. . 4 00 A. M.	
P. M. 5. Night Express 13 " .. . 6.00 "	

It is in contemplation, also, to run a train in connection with the train which leaves New York at 6 P. M., arriving at Albany at 11, provided the Postmaster General will afford a reasonable compensation for expediting the mail to Buffalo ten hours.

The Lake Erie Express train at 7 12 A. M. is intended exclusively for passengers going West of Buffalo. No baggage will be taken for any intermediate point.

Ohio.

Cleveland and Pittsburg Railroad.—We copy the following brief, but satisfactory account of the Cleveland and Pittsburg railroad:—

This road is constructed to Wellsville under one of the best and most liberal charters granted in the State. Cyrus Prentiss of Ravenna, is President of the company. The directors are S. Chamberlin, Henry W. Clark, and Zalmon Fitch, of Cleveland; James Butler and H. N. Day, of Hudson; Cyrus Prentiss and J. B. King, of Ravenna; Jas. Farmer, of Salienville; D. McDonald, John S. McIntosh and James Stuart, of Wellsville. It runs through the counties of Cuyahoga, Summit, Portage, Mahoning, Stark and Columbian, all populous, productive and rich.

The road was commenced in 1847, 18 miles of the southern division being put under contract July 28th of that year. The funds were furnished by the southern division. But little work was done until 1848. March 10th, 1848, 32 miles of the middle division were put under contract; funds furnished by the division. September 4th, 1849, the residue of graduations and masonry, with the superstructure for the completion of the work, were let to the Messrs. Chamberlain & Co. The road is constructed of good materials and in the best manner. The masonry and the bridges will compare with any road built. None of the ties have less than 8 inch bearing, and they are placed only 2 feet from centre to centre. This gives a solidity and durability seldom attained in railroads. The iron is best English T rail, weighing 60 lbs. to the yard. The gauge is 4 feet 10 inches. About half the road is already ballasted, and over this a speed of 40 to 50 miles the hour is often made, without accident or unusual jar. The grade in leaving the pier at Cleveland, and ascending the lake bank is under 40 feet to the mile, which is about the maximum. Tinker's creek bridge is a fine specimen of the builder's art, and crosses a gulf 140 feet deep by a single span 232 feet in length. Its great strength has been tested by bearing over 180 tons at a time, without any perceptible settling. The builders were Messrs. Thatcher, Burt & Co., and the structure does great credit to their enterprise and skill. The deep cut at Sandy Summit, which divides the waters of the Sandy from the Little Beaver is 54 feet deep and 800 feet in length; while the deep cut at Yellow Creek Summit, dividing the waters of Yellow Creek and Little Beaver, is 1200 feet in length, with an extreme depth of cutting of 74 feet. The slate rock walls of the road stand towering and enduring, a proud monument of the triumph of man's energy and enterprise.

The stations on the road are only from 3 to 6 miles apart, and are Newburg, Bedford, Macedonia, Hudson, Earlville, Ravenna, Rootstown, Atwater, Lima, Alliance, Winchester, Moultrie, Bayard, Rochester, Hanover, Brush Run, Salineville, Hammonville, Yellow Creek and Wellsville.—At Hudson, the Akron branch, an independent work, connects with the road. It is completed to Cuyahoga Falls, and will be to Akron by the 1st of June, and from Akron to where it crosses the Ohio and Pennsylvania railroad, 22 miles, next fall. This branch road will be continued to Millersburg, Coshocton and Zanesville, there connecting with the Central Ohio road, and opening a direct route through a very productive country to the rich Muskingum valley. The route of the Cleveland and Pittsburg road to Lima is through one of the finest grazing and dairy sections of the Reserve, and at Lima enters the wheat granary of the State. From thence on, the wheat and flour freights will form a very important item in the business of the road. Many single townships whose surplus will find a market over the road, raised an excess last year of 100,000 bushels of wheat. At Alliance the Ohio and Pennsylvania road crosses the Cleveland and Pittsburg road, opening an iron way to the Iron City, and to Massillon, Canton, Wooster, etc., in Ohio. At Bayard the great produce point on the C. & P. road, the Carroll branch, also an independent work, comes in. It will be completed to Carrollton, 15 miles, in June next. Carroll county stands first in the State for wheat growing, and this branch will contribute much increase of freight and travel to the main track. Rochester is a place of milling

importance, and at Hanover station a branch of 1½ miles will be opened in June to Hanover town. A point of extensive business, particularly in produce. Brush Run and Salineville will furnish large quantities of flour for the road, and at Hammonville a plank road is being constructed to Richmond, in Jefferson county, which will tap another fine wheat section. At Rochester the railroad strikes the coal region, 70 miles from Cleveland. Here are a number of veins of good quality. In the valley of Yellow Creek, from Salineville down the Ohio, there are four veins of superior bituminous coal from 3 to 7 feet thick, the lowest level with the railroad track, and the highest about 70 feet up the banks. The supply is inexhaustible. There are also beds of cannel coal, iron ore, and fire clay in the Yellow Creek valley. As an indication of what the coal business of the road will become when stock facilities are provided for doing it, we state the fact that the company now have applications for contracts to transport one thousand tons per day! The produce and other freights for the road far exceed the means of transportation on hand, and Western Virginia is but just beginning to send forward her surplus over the route. A large business from the Virginia side of the river will naturally make this road its outlet to the lakes and the eastern markets.

The equipments of the road now consist of nine effective locomotives, and six are to be added by the first of June, two of them powerful coal engines from Baltimore, to burn bituminous coal, and capable of hauling 300 tons of coal each. The company have eight first class passenger cars, 100 freight and platform cars, and 85 gravel cars. Additions will be made to keep pace with the business, as rapidly as possible.

The depots, stations, and other fixtures along the route so far as completed, are neat and commodious. At Cleveland the company own twenty acres on the table land, St. Clair street, on which they have extensive car, engine and machine buildings. On the harbor pier they have a valuable front of 250 feet extending back 350 feet, with a commodious passenger and freight depot. On the lake they have three fronts of 600 feet each, for freight, coal, etc., purposes. The first is west of Water street, from which a pier 150 feet wide will be extended parallel with the pier of the C. C. and C. pier, 1200 feet, this spring, with a track for delivery of coal for steamers. The second front is at the foot of Bank street, where the company are now building a pier 150 feet wide and 1000 feet in length. The third is between Bond and Erie sts. The present value of their coal estate on the river and lake is at least \$200,000.

The road was opened to Ravenna, 38 miles, on the 18th of March, 1851; to the 5th of November to Hanover, 75 miles; and to Wellsville, on the 4th of March, 1852; where connection is formed with Pittsburgh by a new splendid steam packet built expressly for that service; and a daily line will also connect the road with Wheeling. By a rule of the company no person using intoxicating liquors or profane or obscene language is employed on the road, and it is hardly necessary to add that prompt, careful management, and courteous, obliging conduct, characterise all the employees. No collision has taken place, and the success of the road is scarcely paralleled. The receipts for passengers and freights so far have more than doubled the estimates of the most sanguine projectors and friends of the important improvement, and the promise for the future is still more cheering.

WHEELING EXTENSION.

The route of the proposed extension from the mouth of Yellow Creek to Wheeling has been surveyed, and is found to be extremely favorable. The distance is 38 miles. No grade exceeds 15 feet per mile, and no curvature with a less radius than 2800 feet. The bridging and masonry are light, and there is no work so heavy as to prevent an early completion. The estimated cost, with one year's equipments, is \$18,000 per mile. The extension road will pass through a populous, rich and productive country, and its importance as a connecting link in the great railroad chain was forcibly portrayed in the welcoming address of J. S. Wheat, Esq., at the late Wheeling celebration. He said—"When completed, it will at this

point unite with the Baltimore and Ohio railroad, leading to the Monumental City, and the Metropolis of the Union, the Hempfield road leading to the city of Philadelphia, and thence onward to the home of the Pilgrims and the cradle of Liberty, and with the Cincinnati and Marietta road, leading through its Portsmouth branch by way of Lexington and Nashville to the great southwest. It will also here unite with the great Central Ohio road, whose iron way leads through Ohio, Indiana and Illinois, (States that would have been empires in the old world) to a union at the city of St. Louis with the gigantic highway to the Pacific. These roads to which I have thus hastily referred, having their terminus upon the very confines of our country—the Forest City, Cleveland on the North, with her sisters on the lakes;—Boston, New York, Philadelphia, Baltimore and the Metropolis of the Union on the Atlantic border;—the cities of the gulf on the south—and the cities of the Pacific on the west, are so many bands, which with others even stronger than they are, must secure the perpetuity of that political Union, which is at once the basis and safeguard of America's civil and religious freedom."

Collins' Line of Steamers.

From the newspapers received by the last American packets it appears that one of the chief topics of attention at Washington, just at this moment, is the claim of the proprietors of the Collins' line of mail steamers, running between New York and Liverpool, for an increased government allowance. According to the representations of these parties, every voyage which their vessels perform results in a heavy loss, and the national pride is appealed to for a further considerable grant in order that the necessity may be avoided of abandoning the competition with the Cunard line, which is looked upon as a rival fleet supported by the British government. Our system of mail contracts is designated as a mere extension of our naval establishment "under cover of private commercial enterprise," and in this way a race for superiority, which, if it had been left to the healthy efforts of individual energy, would have led to nothing but the most beneficial emulation, has grown into a struggle between the two nations, in which all the evils of popular jealousy are zealously fomented. The state of affairs has been little dwelt upon in the exposures hitherto put forth of the pernicious consequences of the contract monopolies, but it is perhaps the most lamentable feature connected with them. It exhibits also a striking specimen of the way in which a bad example is made to spread. The American company do not urge for a moment that the system of government grants is in itself *justifiable*, but they insist that America is driven to it in *self-defence*. "We fear no competition," it is said, "with British enterprise, but when the treasury of Great Britain is brought into competition with our packet service, and seeks to cripple our commerce, and build up at our expense a naval power which will give her the command of the ocean, it is the duty of our government to come to the rescue."

The matter having assumed this inevitable shape the only question now is, how long and to what extent is the contest to proceed, and what will be the position of the mercantile public during its progress? It is the duty of Congress, according to the American view, to sustain the ocean steamers of the United States "wherever they are competing with lines of steamers which draw any portion of their support from the British government." This conclusion being once admitted, we must be prepared to survey the space over which we are called to maintain our pretensions. Australia and China will soon come into the discussion, and the ultimate termination of the battle can only be found in an acknowledgement from one of the two nations that it is exhausted and can go on no longer. When this consummation is likely to be arrived at, or what will be the political feelings which must precede it, are points for the ministry to consider, along with the other conditions which are taken into account whenever a fresh contract is advertised. Meanwhile, the position that awaits the merchants and the travelling public is very plain. Their sailing vessels must continue liable to be driven out of use, not by the natural progress

of steam, but by bounty-paid ships forced in particular directions.—*London Times.*

Export of Metals from the United Kingdom.

The board of Trade returns afford the following detailed account of the quantities of metal of home produce and manufacture exported from the United Kingdom during the month ending the 10th of October last, as compared with the corresponding period of the two previous years:

Metals.	1849.	1850.	1851.
Iron—pig ... tons.	20,309	11,333	18,068
Bar, bolt, and rod.	38,451	44,438	47,094
Wire	478	457	505
Cast	1,580	1,812	1,398
Wrought of all sorts	11,688	14,534	13,680
Steel—Unwrought	801	1,171	1,334
Copper, in bricks and pigs	cwts 19,909	24,169	8,854
Sheets, nails, etc., [including mixed or yellow metal for sheathing,]	26,112	30,373	18,792
Wrought of other sorts	1,027	491	1,495
Brass of all sorts	2,593	3,553	2,625
Lead	tons 2,739	2,345	2,213
Tin—unwrought, cwts.	5,315	4,392	2,514
Tin plates	value £28,177	£88,254	£71,386

These returns show that the increased movement in the metal trade, noticed for so long a period, has this month received a rather sensible check. The total value of all the metals comprised in the above table is £797,812 this year, against £893,780 in the corresponding period of 1850, and £830,310 in 1849. There is thus a decrease of £95,968 on 1850, and of £2,498 on 1849. On referring to the various items, we find the falling off to extend to copper, lead, tin, and tin-plates, but it is most evident in the first named article, the exports of copper and brass being only £137,808, against £243,218 last year, and £210,626 in 1849. Iron, on the other hand, has largely increased, the aggregate figures being £193,705 this year, against £164,018 and £146,213 in the same month of the two previous years. Steel has also increased; the returns for the nine months ending with the same date, give the total exports as follows:—1851, £7,189,107; 1850, £6,869,076; 1849, £6,316,420; so that the aggregate trade of the year, so far as yet ascertained, shows an increase of £320,031, or 4½ per cent. over the same period of 1850, and an increase of £972,687, or 15 per cent. over the year before. The foreign trade in iron is proved to be steadily extending, as the demand for foreign railways is more sensibly felt. The iron and steel exports are £4,393,076 in 1851, against £4,020,355 in 1850, and £3,667,348 in 1849. Copper figures for only £1,291,407 against £1,429,773 in 1850, and £1,414,377 in the year previous. In the year's returns of tin-plates and lead there is a considerable increase, so that the falling off of the month is only a trifling reaction, but the decrease in tin is continuous.—The exports of foreign and colonial produce for the month ending October 10th, are as follows:

	1849.	1850.	1851.
Copper unwrought and part wrought	cwts. 1045	3151	1483
Iron, in bars, unwrought	tons 571	758	1174
Steel unwrought	9	23	168
Lead, pig and sheet	742	191	298
Spelter	424	126	205
Tin, in blocks, ingots, bars, or slabs	cwts. 808	849	1460
Quicksilver	lbs. 116,527	29,419	67,332

On the nine months we have a great increase in copper, which stands at 22,569 cwts., against 12,447 in 1849. Taking this result in connexion with the diminished export of our home produce, it is evident that the foreign and colonial supplies of this metal are daily becoming of more importance, the working of the copper mines of Australia producing a sensible effect. Iron has slightly fallen off, whilst steel and tin remain at the reduced range of last year, though this last item is recovering.—Spelter is steadily decreasing, the figures being only 1509 tons, against 3110 tons last year, and 3632 in

1849. The returns of imports for the month ending October 10, are:

Metals.	1849.	1850.	1851.
Copper ore and regulus tons.....	5627	4174	1805
Copper, unwrought, and part wrought...cwt's...	1015	2807	5360
Iron, in bars, unwrought. tons.....	4739	5068	7146
Steel, unwrought.....	102	...	39
Lead, pig and sheet.....	1100	695	1356
Spelter.....	2371	2269	1468
Tin, in blocks, ingots, bars, or slabs...cwt's...	3967	539	5704
Quicksilverlbs ...100,469			

In this instance also, taking the nine months' returns as the basis of comparison, there is exhibited a continuous falling off in the various descriptions of copper, and an increase in iron and steel. Lead and tin have also largely augmented, showing the increased consumption of the country. Spelter has risen to 16,204 tons, against 11,429 last year, and 8722 in 1849; and as the exports of this article are as gradually diminishing, it would appear that the free admission of this metal is bringing it into much more extensive use.—*London Mining Journal.*

Travel on Lake Erie and the Upper Lakes.

Ward's Line.—Season Arrangements.—This morning, we publish, in another column, the programme of arrangements entered into by this line of swift and splendid steamers, in connection with our Central road. It will be seen that the three favorites of the public, the Mayflower, Ocean and Atlantic, are again to be in commission on the North Shore route, between this port and Buffalo, to run in connection with the passenger trains of the Michigan Central railroad. The Caspian, if necessary, relieves the Mayflower, on the opening of navigation, until the latter is in readiness for the service. One of these boats will leave the Central railroad wharf every week day morning, during the season, at 9 o'clock, and will reach Buffalo in ample time for the earliest eastern train of the following morning, without any chance of failure except from unavoidable accident. With such unsurpassed facilities as will be afforded for through travel from Chicago to Buffalo, by our railway and steamers, we have no doubt that the line will continue to be as abundantly patronized as heretofore. Its deserved popularity will be also amply sustained by the indefatigable attentions of all the agents and officers engaged on the route.—*Detroit Free Press.*

Below we copy a portion of the advertisement of the Upper Lakes Line.

The Steamers LONDON and SAM WARD will leave Detroit for the Saut Ste. Marie, touching at Mackinac, WEDNESDAYS and SATURDAYS, at 9 o'clock A. M., in connection with the steamers CLEVELAND and FORREST CITY, running between Cleveland and Detroit, with the ATLANTIC, OCEAN and MAYFLOWER between Detroit and Buffalo, with steamer ARROW between Sandusky and Detroit.

Passengers at Buffalo, Cleveland and Sandusky can procure tickets or ship freight on any of the above boats, with the assurance of a speedy transit to the Saut, and thence to all points on Lake Superior by the steamer Baltimore and Propellers independence and Napoleon.

The propeller Peninsula will also run regularly between Cleveland and the Saut, touching at Detroit, Lexington, Point au Barks, au Sauble, and at Thunder Bay Islands.

On the 1st of July next a new low pressure steamer, of 600 tons, will be placed on the above line, and as much tonnage will be added to the Lake Superior fleet as may be necessary to perform all the service required by the increasing demands of business here.

With the above steamers and their connections, together with the railroad across the portage at the

Saut, the proprietors of the lines are enabled to offer the best and surest facilities ever presented to the public for the conveyance of themselves or their freights to the mining regions of Lake Superior, and they confidently hope to perform the service they have undertaken to the satisfaction of those who may favor them with their patronage.

Freights consigned to S. P. BRADY or C. A. TROYBRIDGE, Detroit, will receive immediate attention.

AGENTS.

Stephen Clement, Detroit; S. McKnight, J. R. Livingston, Saut Ste Marie.

Ohio County Bonds.

Decision of the Supreme Court of Ohio—We announced last week the decision of the Supreme Court of Ohio, affirming the constitutionality of the Ohio county bonds. We have now read a copy of the decision, which we present to our readers. It does not present the argument of the Court only the conclusions to which it came. The opinion of the Court was unanimous.

The State of Ohio on the relation of the Cincinnati, Wilmington and Zanesville railroad company vs. the county commissioners of Clinton county—Mandamus.

Ranney, J., held:

1. It is the right and duty of the judicial tribunals to determine whether a legislative act drawn in question in a suit pending before them, is opposed to the constitution of the U. States, or of this State; and if so found to treat it as a nullity.

2. In such cases the presumption is always in favor of the validity of the law; and it is only when manifest assumption of authority and a clear incompatibility between the constitution and the law appears, that the judicial power will refuse to execute it.

3. The General Assembly, like the other departments of government, exercises only delegated authority; and any act passed by it not falling fairly within the scope of "legislative power," is as clearly void as though expressly prohibited.

4. The power of the General Assembly to pass laws cannot be delegated by them to any other body, or to the people.

5. The act of March 1, 1851, to authorize the commissioners of said county to subscribe to the capital stock of the relator, does not delegate legislative power, or contravene the constitution of 1802, in providing that the subscription shall not be made until the assent of a majority of the electors of the county is first obtained at an election held for that purpose.

6. It was competent for the Legislature under that constitution to construct works of internal improvement on behalf of the State, or to aid in their construction by subscribing to the capital stock of corporations created for that purpose, and to levy taxes to raise the means, and by an exercise of the same power to authorize a county to subscribe to a work of that character running through, or into such county, and to levy a tax to pay the subscription.

7. Such a tax, when thus authorized, is not beyond the legitimate scope of local municipal taxation; nor is it opposed to article 8, section 4 of the constitution declaring that "private property ought and shall ever be held inviolate, but always subservient to the public welfare provided a compensation in money be paid to the owner."

8. The taxing power for such persons, under that instrument, was an undeniable legislative function, to be exercised at the discretion of the General Assembly and subject to no limitation but that against poll taxes; and while this court is unanimous in the opinion that such laws may involve an abuse of that power, it possesses no authority to control that discretion, or to correct such abuses by the exercise of a veto power on such legislation.

9. A majority of the electors of Clinton county having decided in favor of the subscription, and the same having been actually made before the adoption of the present constitution; and the commissioners having elected, in pursuance of said act, to deliver the bonds of the county to the company in payment of the subscription, and become bound to do so, and afterwards refusing, upon demand, to

deliver them; and showing no cause for such refusal except that the act aforesaid was of doubtful constitutionality; a writ of mandamus is the proper remedy to enforce the delivery.

10. This writ lies in all cases where the relator has a clear, legal right to the performance of some official, or corporate act by public officer, or corporation, and no other adequate, specific remedy.

Preemptory mandamus awarded.

Prosperity of Southern Railroads.

The earnings of the Charleston and Hamburg road, at this time, furnish just theme of gratulation in our neighboring city. It is stated that for the month of February 1852, the gross receipts were \$104,000 and upwards, against about \$80,000 for the same month in 1851. We are always pleased to chronicle the prosperity of our Southern works.

We requested the President of the Central railroad to furnish for publication, a statement showing the earnings of that road for December, January and February last, being the first quarter of the fiscal year of the company. We have to express our great gratification on reading the following exhibit:

Earnings of the Central railroad for the first quarter of the current year:

	1850.	1851.
December.....	\$83,810 33	\$103,230 73
1851.	1852.	
January.....	\$91,611 20	\$101,474 95
February.....	81,794 11	110,946 30
	257,215 73	\$315,651 98
		257,215 73

Gain in three months..... \$56,436 25

The current month of March shows, so far, a greater gain.—*Savannah News.*

Massachusetts.

The annexed table presents the statistics of the railroads for Massachusetts for 1849, 1850 and 1851:

	1849.	1850.	1851.
Number of rail-ways.....	31	36	36
Miles of road and branches.	1,138	1,142	1,150
Gross cost....\$51,801,120	51,873,985	52,595,288	
Average cost per mile.....	45,599	\$45,421	\$45,556
Gross receipts..6,162,014	6,466,872	6,599,575	
Gross expenses..2,100,694	3,142,945	3,338,905	
Net income....3,061,320	3,323,902	3,360,671	
Average net income, per et. on cost.....	6.09	6.41	6.20
Gross No. of miles run....4,271,935	4,287,210	4,398,370	
Av. receipts per mile run....1.41	1.51	1.50	
Av. expenses per mile run..0.71	0.73	0.76	
Av. net income per mile run..0.70	0.78	0.74	
No. of pass. carried.....8,788,589	8,856,656	9,510,858	
Do. carried one mile.....144,305,281	147,888,327	152,916,183	
Tons of merchandise carried.....2,167,754	2,219,050	2,260,316	
Do. carried one mile....70,848,225	72,573,289	70,205,310	
Total weight of pass. trains in tons, hauled 1 mile, not including pass.114,962,615	100,383,950	98,767,749	
Total weight of freight trains in tons, haul'd 1 mile, not including frt..135,285,503	130,571,531	118,695,509	
Total No. of 'ns not including pass. hauled one mile....321,078,871	303,528,761	287,667,568	
Nine of the companies make their returns for			

only eleven months of 1851. If the operations of twelve months were added, it would change the result somewhat. The net income per cent. on cost is somewhat less than in 1850. The aggregate traffic of the road shows but a moderate increase over 1850.

The Trade of the Lakes.

Railroad, Direct from the City of Oswego, on Lake Ontario, to Philadelphia, via Syracuse, Binghamton, Scranton, Water Gap, Belvidere, etc.

We have frequently spoken of the proposed road from Syracuse to Binghamton as a very important work, not only in its local aspects, traversing, as it does, a fertile and highly cultivated region, but as a through route, connecting the coal fields of Pennsylvania with central New York and the lakes, and opening a direct line of railroad between all the New York improvements and Philadelphia. That city the value of the above road cannot be overestimated, and we are happy to see that it is attracting much attention from her leading citizens who are taking measures to push a road up the Delaware valley to connect with it. That our readers may see in what light the project is viewed in Philadelphia, we copy the following article from a recent number of the *Bulletin* of that city.

We have heretofore referred to the projected railroad from Syracuse to Binghamton, as forming an important link in a direct railway from Lake Ontario to this city. But it was not until recently, that we have had sufficient data to judge with accuracy as to its merits and prospects, and the benefits to result to our own State and city by its construction. We have now a map before us delineating the entire route from Oswego to Philadelphia, together with a table of distances, grades, etc., and we are free to say that no project has struck us so favorably for a long time.

It will open a direct communication between the valley of the great lakes and this city by a route much nearer than any other. From Oswego to Syracuse—thirty-five miles—a railroad is in operation. From Syracuse to Binghamton, the distance is 75 miles. A company has been incorporated to construct a railroad between these two places, with a capital of \$1,200,000. It is to this particular road we wish to call attention at this time. The route has been surveyed through the rich valleys of Onondaga, Courtlandt and Broome without going abroad for a dollar. From the Engineer's report, it must be a cheap road to make. It intersects the New York and Erie road at Binghamton—thence to the Great Bend, in this State, 15 miles—thence by the Lackawanna and Western railroad, now in full operation, to the great anthracite coal fields at Scranton, 48 miles. From Scranton to the Delaware Water Gap, a distance of 50 miles, a company has been incorporated to construct a railroad, and the stock subscribed.

We are assured that it will be finished during this and the next year. Our citizens understand the state of forwardness of the road from the Water Gap to Easton via Belvidere—thence to Lambertville, from which latter place, as we all know, a railroad is in successful operation to Philadelphia.

We ask our fellow citizens to look at the map above referred to, which they will find posted at the United States Hotel and at the Exchange.

The distance by this route from Lake Ontario to Philadelphia, is but 316 miles, and this may be reduced 12 miles, by adopting the Doylestown route, while the distance from the same place, via Albany and New York, is 414 miles. The Syracuse and Binghamton road, aside from its being part of a great through line from Lake Ontario, will have local advantages beyond most other roads. Syracuse, in the county of Onondaga, is a city of 25,000 inhabitants, situated in the geographical centre of the State of New York.

The annual report of the Superintendent of the salt springs, shows that five millions bushels of salt

are manufactured there, and we are assured that the quantity might be doubled in a single year, could they reach a market—but owing to the present high price of wood (\$3.50 to \$4 per cord) the manufacture cannot profitably be extended beyond the quantity now made. When the Syracuse and Binghamton road is completed, anthracite coal can be delivered at Syracuse from Scranton, 137 miles, at \$3 to \$3.50 per ton. This must reduce the present price of fuel at Syracuse one hundred per cent, and when we reflect, that the present salt works, when all in operation, consume two thousand cords of wood daily, in addition to what is used for other purposes by the city, there must be an immense amount of coal transported over this road, and this will increase with the increase of the manufacture of salt. Oswego, a city of fourteen thousand inhabitants, is the chief port on this side of Lake Ontario, having a large and increasing trade with Canada, and the upper lakes, by way of the Welland Canal. It has also an amount of grain mills capable of grinding ten thousand barrels of flour daily.

For the supply of the country bordering upon the lakes and Canada, with anthracite coal, Oswego will require at least half as much as Syracuse. Their vessels need this article as ballast, and it has, to some considerable extent, been transported as such during the past season, at a very low charge, to Milwaukee, Chicago, etc. The coal thus transported came from Rondout on the Hudson river, at the cost of six dollars per ton at Oswego. As return freight, the flour of Oswego, and salt, gypsum, cement, and lime of Onondaga county, will furnish a very large amount. Add to this, the transportation of the produce of the rich country through which the road is to pass, and it is easy to see, that as a mere *local* road, it must be a good and paying stock—but when it is viewed as a great thoroughfare for passengers, it would seem that no doubt can exist as to its being a very valuable road and a desirable stock for investment. We are indebted for much of our information, as to these details, to the Hon. Henry Stephens, of Courtlandt—the President of the Syracuse and Binghamton road—to Gen. James R. Lawrence, of Syracuse, and L. McWhorter, Esq., of Oswego, who are now here at the United States Hotel, and desire to call the attention of our citizens to this important subject.

The completion of this route from Lake Ontario to this city will open a trade to Philadelphia with the Canadas, the value of which can hardly be overestimated. The value of the Canada trade the past season with New York and Boston, via Oswego, was, according to the books of the Custom House, four millions nine hundred and ninety-seven thousand dollars—being, of imports \$1,789,598, and of exports \$3,207,811. This trade has heretofore been monopolized by New York and Boston. But by completing the above route, this city can compete on equal terms for this immense and rapidly increasing business.

This statement does not embrace the coastwise trade of the port of Oswego, which amounted in 1851, to \$17,597,837. These facts are well worth the attention of our merchants and business men, and cannot fail to make a deep impression upon every well-wisher of Philadelphia.

Raleigh and Gaston Railroad.

We learn that fifteen miles of this road have been laid with heavy iron, and that the work of repairing and relaying is going forward with energy and spirit. Three ships, laden with iron for this road, have recently arrived; and the quantity now being received will, it is supposed, be sufficient to complete the road to Henderson.

We have recently observed, with pleasure, the improvements already made and in progress on the premises of the depot of this road, in this city. A considerable addition has been made to one of the workshops, one of the lots has been enclosed, and some of the buildings repaired, etc.

The prospects of this road are improving and brightening. When completed, it will be one of the best roads in the country; and the stock, it is believed, will yield good dividends.—*Raleigh Star.*

Great Reduction in Canal Tolls.

The board of public works have reduced the tolls on all articles from Cincinnati to Dayton to the uniform rate of *two mills per mile*, and to *one half mill* from Dayton to Cincinnati. The tolls were previously six to ten mills per mile from this city to Dayton, and three to four mills from Dayton down. This change will make a difference in the freight on a barrel of flour from Dayton to Cincinnati of *fourteen cents per barrel*, and in equal proportion to other articles. The change in the price of freight on groceries, iron, manufactures, etc., going up is also great, and the benefit to the trade of Cincinnati will be immense.—*Cincinnati Gazette.*

Illinois.

Galena and Chicago Railroad.—The long hoped for day has at length arrived, when a citizen of Rockford can go into Chicago and return within the space of one day, besides leaving him two or three hours in the evening to transact business.—When the road reaches Rockford, which will be in three or four months, people will be enabled to breakfast here, go to Chicago, and return to tea.

The road is doing an immense business, far exceeding the first calculations of its most ardent friends, and scattering the foolish predictions of its enemies to the winds, enriching community and company as it progresses, and proving the toughest bond to enlarged social convenience and enjoyment.—*Rockford Forum.*

The Sunbury, (Pa.) American of Saturday last says—

The ice dams in the Susquehanna have all passed off without doing any damage. The river is still much swollen, and although some few rafts of timber have passed down, the stage of water is too high for safe navigation. The water has been let into the Susquehanna division of the canal, and boatmen have resumed their labors. Business opens very briskly and promises a favorable season for the coal trade. The severe weather of the past winter has caused a consumption of coal much greater than has taken place for a number of years. A scarcity of that article exists in the market, and the commencement of shipments has been looked for anxiously. Coal is fast taking the place of wood for fuel in the southern cities, and in a few years the immense fields of Shamokin and Mahonoy will scarcely be able to supply the demand.—Preparations have been made by the colliers in those regions to send a large quantity of coal to market during the coming season. The superior quality of this coal has made it deservedly popular and eagerly sought after, and it is rapidly taking the place of all other coal in the Baltimore market.

Roanoke Valley Railroad.

The stockholders in the Roanoke Valley railroad [between Clarksville and Ridgeway] held their first meeting at Weldon on the 16th inst., and proceeded to organize themselves into a company by the election of the following officers:

President—David Shelton.

Directors—Francis Mallory, of Norfolk; Silas H. Harris, of Clarksville; James Williamson, of Mecklenburg.

[Henry Wood and Samuel D. Booker, appointed Directors by the Board of Public Works.]

E. A. Williams, Secretary and Treasurer.

Blanch, Principal Engineer.

John Tunis, Esq., was present at the meeting as the representative of the stock of this city.

[The foregoing was prepared for our last paper, by one of the many unforeseen casualties of printing was omitted.]—*Norfolk Herald.*

Routes West.

We understand, says the Chicago Tribune, that the New York and Erie railroad company have made arrangements with the Michigan Central railroad company, for freighting merchandise, etc., between New York and Chicago. It has heretofore been supposed that this arrangement would be made with the Michigan Southern road. It failed, we believe on account of the Erie company not being

able to secure a line of propellers between Dunkirk and Monroe, Michigan. The consummation of such an arrangement will probably hasten the completion of the Michigan Central railroad to this city by the first day of May.

American Railroad Journal.

Saturday, March 27, 1852.

Ohio and Indiana Railroad.

We have received the first annual report of the President of this road, together with that of the Chief Engineer, from which we learn that the entire work, including the furnishing of all material, except the iron rails and rolling machinery, was put under contract the 28th of January last. It is the expectation of the engineer that the road will be completed in two years, and in order to avoid all delay in obtaining the iron, he advises that it be contracted for as soon as the grading is begun. By this means the iron could be laid on the light work at the eastern end of the road, as soon as it is graded, and the following winter would find the grading completed, and much of the track laid.

The cost of the road is estimated at \$1,640,000; to meet which the company have already in county subscriptions \$400,000, and an amount secured from private individuals equal to \$311,600, making an aggregate sum of \$711,600, or nearly one-half the entire cost of the road and equipment.—The remainder can probably be raised without much difficulty, when the road is fairly under weigh, and its construction secured.

The entire length of the road from Crestline, Ohio, to Fort Wayne, Indiana, is 131½ miles. No curves exist except those caused at towns; the aggregate curvature of the line being only 214 degrees, all of which is at or near the stations. One straight line is over 40 miles long, another 30 mls., and the aggregate length of straight line on the whole distance is 127½ miles. But one curve is used having a radius so small as half a mile.

In gradients the line is also well favored, having no grade greater than 26½ feet to the mile, while 63 miles of the whole road is absolutely level.

The region traversed, though comparatively new in Ohio, is rapidly increasing in wealth and population, more so than in any other part of the State. The decennial increase, according to the census of 1850 was 93 per cent, while that of the whole State was only 32 per cent, or little more than one-third. Allen county, in Indiana, in which Fort Wayne is situated, has in ten years increased nearly 200 per cent in population, and in taxable property 50 per cent in three years. At Fort Wayne, the exports by canal in 1850 were 15,611 tons, (or 63 tons per day,) and the imports 91 tons per day. These facts show the fertility of the soil, and the rapidly increasing population of the counties through which the road passes. It is easy to see that the local traffic will be large. The amount of taxable property along the line is a sufficient surety for this.—If any doubts existed upon the subject, they could easily be solved by referring to the earnings of other roads running through less favorable portions of the State.

The connections the Ohio and Indiana railroad will form with other roads will be of great importance to it. The first of these connections is the Ohio and Pennsylvania railroad, which terminates at Crestline, where the Ohio and Indiana road begins. This road offers the shortest route to Philadelphia and the Atlantic seaboard, and when the

proposed connection between Fort Wayne and Chicago is effected will, in conjunction with the Ohio and Indiana railroad, form the most direct line to that important city. The Ohio and Indiana road will also cross the Mad River road (133 miles long) the Troy and Toledo road, the Miami canal (268 miles long) and the Wabash and Erie canal, which will prove a most valuable feeder, from the large amount of traffic which passes over it.

Owing to these connections, the through traffic will be no less profitable than the local, and if the road can only be energetically carried through, it will amply repay the cost of construction.

At the meeting of stockholders the following officers were chosen for the ensuing year:—President, Willis Merriman; Secretary and Treasurer, Franklin Adams. Directors, Willis Merriman, Bucyrus, Crawford county, Ohio; Franklin Adams, do.; Henry Peters, Upper Sandusky, Wyandot county, Ohio; J. K. Jacobs, Lima, Allen co., Ohio; Lester Bliss, Delphos, do.; Samuel Hanna, Fort Wayne, Allen county, Indiana; Pliny Hoagland, do.; Chief Engineer, Jesse R. Straughan; Resident Engineer, Lot Dixon.

Railroad Scales.

There is probably no branch of business carried on, that requires so much care and attention as the manufacture of railroad scales. It is an article that should be perfect in all its parts. There is scarcely any transaction in the commercial world that has not more or less weighing connected with it, and more particularly in all that relate to the transportation of merchandize. It has become an established rule in the transportation of freight, on railroads, to carry it by weight. Hence, the need of an article that will stand the test of complete exactness in all the cases to which it may be applied.

The railroad track scale is put in use by most of the companies as the most convenient method of weighing their freight in bulk, in cars; and being placed in the track, it is necessary to have it made in a very strong and substantial manner, and so constructed as to keep in repair.

The Depot Scales, that are placed in the floor of warehouses require to be very exact, as it is often the case that produce is bought and sold by weight upon these scales, as well as freight. Take for instance, Wheat Scales, for receiving and discharging wheat. It is of the utmost importance that such scales should be so constructed as to give them both permanency and correctness. In fact there is no branch of weighing machinery but what should be made of the best material and on the most approved plan. Dollars and cents are at stake in the weight of every article, such as produce of every kind, the mineral productions of the earth, coal, iron, zinc, copper, etc., and therates charged for transportation of the same to market, is determined by weight.

Of the leading scale manufacturers in this country, we may name Duryee, Forsyth & Co., of Rochester, New York. The excellence of the scales made by them has led to their adoption by a very large number of our leading railroad companies, by whom they are held in very high favor; and which of itself is the very best certificate of their quality. In another column we have given a list of some of the roads upon which they are in use.

The same firm also manufacture canal weigh locks, and have recently placed one upon the Erie Canal at Rochester, the exactness and capacity of which is believed to be without a parallel. The

capacity of this lock is 400 tons. Upon this scale, the vast tonnage passing through the canal is all weighed, for the purpose of ascertaining the tolls to which each boat is subject. The accuracy of his scale is such as to "divide the difference of a pound." The same firm are now constructing a lock for the Ohio canal upon the same principle.

The works of Duryee, Forsyth & Co., are located at Rochester, New York, and possess great advantages of position in being able to forward their scales in every direction at a very low cost. They are also well situated for securing the raw material at favorable rates. They keep a large number of operatives at work, which enables them to execute orders with great despatch.

We can safely commend the above firm to our railroad companies; assuring them, that if they want good work, and their orders filled with promptness, they cannot go to the wrong place by patronizing the above concern.

American System of Railroads.

J. Disturnell, 179 Broadway, New York, has in preparation an outline map of the United States and Canada, showing all the railroads and lands finished; also, all the unfinished and projected railroads where a survey has been made. The whole has been carefully compiled from the most reliable authorities, and will be published under the patronage of railroad companies and others interested in internal improvements. The price to subscribers, payable in advance, is \$5, to non-subscribers, \$6.

N. B.—All persons interested in railroads or works of internal improvement, are invited to examine the proof sheets of said map, and patronize the same by giving their names to the publisher, at the GEOGRAPHICAL ROOMS, 179 Broadway, third story, between Courtlandt and Dey streets.

Stock and Money Market.

We have but little new to add to our last report. Money continues abundant, and there is a good demand for first class securities of new works, which is fully equal to the supply. A good feeling exists toward new projects, and no difficulty exists in negotiating good railroad bonds—such, we mean, as are based upon sufficient security. The prospect for the season is very encouraging for our roads in progress, many of the most important of which will be fairly out of the woods in a few months, should no commercial revision take place the present year.

We would urge upon companies the importance of not making their appearance in the market for the purpose of selling their bonds, till their schemes are well matured, and until they shall be in a position to command fair terms. If they cannot do this, they may rely upon it that their project is immature; for it should be borne in mind, that railroads are merely *commercial* enterprises, and are to be conducted upon commercial principles, which never sanction an enormous sacrifice for a contingent good.

The securities most in demand are the convertible bonds of roads just going into operation. These are sought for, under the belief that they will show a rapid advance so soon as the roads shall have had time to demonstrate their capacity for business. There is a strong conviction that the stocks of western roads are to pay much better than bonds, even at the large discount at which they are selling. The convertible clause invests the bonds with a speculative, and adds considerably to their market value.

The good effects of the decision relative to the Ohio county bonds are already seen in large purchases that have been recently made of them, for foreign investment.

Pennsylvania Railroad.—The following is a comparative statement of the receipts upon this road during the months of January and February, 1851 and 1852:

Receipts for freight and passengers in Jan., 1851 \$12,435 97
Receipts for tolls 2,238 07

Total January, 1851 \$15,674 06
Receipts for freight and passengers in January, 1852 \$32,466 45
Receipts for tolls 1,007 21

Total Jan., 1852 \$33,473 66
Receipts for freight and passengers in Feb., 1851 \$18,523 47
Receipts for tolls 1,586 76

Total Feb., 1851 \$20,110 25
Receipts for freight in February, 1852 \$79,920 74
Receipts for passengers 71,808 92

Total Feb., 1852 \$151,729 66

Macon and Western Railroad.—The earnings of the Macon and Western railroad for the month of January, 1852, were—

Passengers \$9,087 98
Mail 1,177 55
Freight 15,517 67

Total \$25,783 20
January, 1851 24,198 01

Increase \$1,585 19

The receipts of the Galena and Chicago railroad for the month of February were as follows:

Freight \$14,219 48
Passengers 5,236 30
Mails 257 15 \$19,712 9
Earnings Feb., 1851 7,800 6

Increase \$11,912 33

EARNINGS AURORA BRANCH.

Freight \$1,190 84
Passengers 633 39 \$1,824 23
Earnings Feb., 1851 1,132 16

Increase \$692 13

EARNINGS ST. CHARLES BRANCH.

Freight \$246 53
Passengers 75 46 \$321 99
Earnings Feb., 1851 239 63

Increase \$82 36

Total earnings, Feb., 1852 \$21,859 15
" " " 1851 9,172 34

Increase \$12,686 81

The receipts of the Mad river and Lake Erie railroad show a large increase in February, over the same month of last year. The figures for January and February are as annexed:

	1851.	1852.
January	\$16,069 57	\$15,003 30
February	17,091 16	25,919 42
Total	\$33,160 73	\$40,922 72
Increase in 1852		7,761 99

The receipts on the Ohio and Pennsylvania railroad in February were:

From passengers \$8,673 75
From freight 2,657 06

Total \$11,330 81

Number of passengers carried in Febr.

uary 9,521

The receipts of the first week in March were..... \$2,602

It appears from the returns of some of the railroad companies in this State, that the business on the Central line continues to improve. The traffic of the Rochester and Syracuse road in

February, was \$51,994 60
February, 1851 45,986 40

Increase in 1852 \$6,008 20

The receipts in February, 1851, were under a reduction to 3c. fare, and in February, 1852, under a further reduction to 2c. per mile.

The receipts of the Harlem railroad notwithstanding the unfavorable winter, show a large gain in the months of January and February over the same months of last year. The gain is especially large in February, being in that month about 30 per cent. The figures are as annexed:

	1851.	1852.
January	\$41,163 47	\$45,601 03
February	36,818 90	46,286 91

Total \$77,982 37 \$91,887 94

Increase in 1851 13,905 57

The gross receipts of the Housatonic railroad for 1851, were \$329,041; an increase of \$19,000 over 1850. The expenditures were \$160,139, showing an excess of receipts over expenditures of \$168,962. Deducting the rents of the Berkshire and Stockbridge railroads, \$74,808, the net receipts are \$74,094. Interest on bonds, \$21,000; paid on floating debt, \$57,402. The whole of the floating debt will probably be paid off during the current year.

Railway Share & Stock List; CORRECTED WEEKLY FOR THE AMERICAN RAILROAD JOURNAL.

NEW YORK, MARCH 27, 1852.

GOVERNMENT AND STATE SECURITIES.

U. S. 5's, 1853	101 1/2
U. S. 6's, 1856	106 1/2
U. S. 6's, 1862	112 1/2
U. S. 6's, 1862—coupon	113
U. S. 6's, 1867	117 1/2
U. S. 6's, 1868	117 1/2
U. S. 6's, 1868—coupon	120
Indiana 5's	88
Alabama 5's	91a92
Alabama 2½	43
Alabama 6's—Canal loan	
Alabama 5's—Canal preferred	41
Illinois 6's, 1847	75 1/2
Illinois 6's—interest	47
Kentucky 6's, 1871	107 1/2
Massachusetts sterling 5's	105 1/2
Massachusetts 5's, 1859	100 1/2
Maine 6's, 1855	103
Maryland 6's	102 1/2
Michigan	
Mississippi	
New York 6's, 1854-5	103
New York 6's, 18-0-61-62	109
New York 6's, 1864-65	114
New York 6's, 1/2 y., 1866	115
New York 5½'s, 1860-61	102
New York 5½'s, 1865	104
New York 5's, 1854-55	
New York 5's, 1858-60-62	102 1/2
New York 5's, 1866	104
New York 4½'s, 1858-59-64	97
Canal certificates, 6's, 1861	104
Ohio 6's, 1856	106 1/2
Ohio 6's, 1860	109
Ohio 6's, 1870	113
Ohio 6's, 1875	114 1/2
Ohio 5's, 1865	104
Ohio 7's, 1851	100
Pennsylvania 5's	90 1/2
Pennsylvania 6's, 1847-53	
Pennsylvania 6's, 1879	105 1/2
Tennessee 5's	85
Tennessee 6's, 1880	102
Virginia 6's, 1886	108 1/2

CITY SECURITIES—BONDS.	
Brooklyn 6's	106 1/2
Albany 6's, 1871-1881	106
Cincinnati 6's	95 1/2
St. Louis	93 1/2
Louisville 6's 1880	94
Pittsburg 6's, 1869-1871	96 1/2
New York 7's, 1857	108
New York 5's, 1858-60	101 1/2
New York 5's, 1870-75	102 1/2
New York 5's, 1890	102 1/2
Fire loan 5's, 1886	101 1/2
Philadelphia 6's, 1876-90	102 1/2
Baltimore 1870-90	104 1/2
Boston 5's	100 1/2

RAILROAD BONDS.

Erie 1st mortgage, 7's, 1868	115
Erie 2d mortgage, 7's, 1859	104 1/2
Erie income 7's, 1855	94 1/2
Erie convertible bonds, 7's, 1871	92 1/2
Hudson River 1st mort., 7's, 1869	105
Hudson River 2d mort., 7's, 1860	95 1/2
New York and New Haven 7's, 1861	103
Reading 6's, 1870	84 1/2
Reading mortgage, 6's, 1860	81 1/2
Michigan Central, convertible, 8's, 1860	103 1/2
Michigan Southern, 7's, 1860	90 1/2
Cleveland, Col. and Cin. 7's, 1859	103 1/2
Cleveland and Pittsburg 7's, 1860	93
Ohio and Pennsylvania 7's, 1865	95 1/2
Ohio Central 7's, 1861	90

RAILROAD STOCKS.

[CORRECTED FOR WEDNESDAY OF EACH WEEK.]

Mar. 17. Mar. 24.

Albany and Schenectady	100	100 1/2
Boston and Maine	104 1/2	104 1/2
Boston and Lowell	109 1/2	110
Boston and Worcester	101	100 1/2
Boston and Providence	87	88 1/2
Baltimore and Ohio	63	63 1/2
Baltimore and Susquehanna	34	32
Cleveland and Columbus	—	—
Columbus and Xenia	—	—
Camden and Amboy	—	—
Delaware and Hudson (canal)	112	112 1/2
Eastern	97	96 1/2
Erie	85 1/2	85
Fall River	98	98 1/2
Fitchburg	98 1/2	105
Georgia	—	—
Georgia Central	—	—
Harlem	72 1/2	71 1/2
" preferred	106 1/2	110 1/2
Hartford and New Haven	126	121
Housatonic (preferred)	35	37 1/2
Hudson River	66 1/2	67 1/2
Little Miami	—	—
Long Island	29 1/2	22 1/2
Mad River	—	—
Madison and Indianapolis	93	92
Michigan Central	97 1/2	96 1/2
Michigan Southern	104 1/2	107
New York and New Haven	111	112
New Jersey	126	129
Nashua and Lowell	106	106 1/2
New Bedford and Taunton	117	117
Norwich and Worcester	56 1/2	57 1/2
Ogdensburg	27 1/2	26 1/2
Pennsylvania	—	—
Philadelphia, Wilm'gton & Balt.	29	29
Petersburg	—	—
Richmond and Fredericksburg	—	—
Richmond and Petersburg	—	—
Reading	74 1/2	74 1/2
Rochester and Syracuse	109	112 1/2
Stonington	54 1/2	54
South Carolina	—	—
Syracuse and Utica	127 1/2	125
Taunton Branch	115	115
Utica and Schenectady	127 1/2	127 1/2
Vermont Central	204	204
Vermont and Massachusetts	22 1/2	20 1/2
Virginia Central	—	—
Western	103 1/2	103 1/2
Wilmington and Raleigh	57 1/2	56 1/2

Zinc Paint.

The attention of our readers is called to the Advertisement of Zinc Paint in another column.

Tennessee.**ACT OF THE TENNESSEE LEGISLATURE, LOANING THE CREDIT OF THE STATE TO RAILROAD IMPROVEMENTS.**

We give below an abstract of the late act of the Tennessee Legislature, to establish a system of internal improvements in that State.

The first section of the act relates to the East Tennessee and Virginia railroad company. It provides that the Governor of Tennessee shall issue to that company *coupons* bonds of the State to an amount not exceeding \$8,000 per mile, whenever they shall have obtained *bona fide* subscriptions to their stock of an amount sufficient to grade, bridge and prepare for the rails, the entire line of the road, and shall have finished a section of 30 miles of said road at either terminus in a good and substantial manner, which section shall not be subject to any lien whatever, other than those created in favor of the State by the acts of 1851-52. These bonds are to be payable at any place the President of the company may designate, bearing an interest of six per cent per annum, payable semi-annually, and not having more than forty, nor less than thirty years to mature.

The second section enacts that bonds shall not be used by the company for any other purpose than for procuring the iron rails, chairs, spikes and equipments for said section of the road, and for putting down the rails on the same.

In the third section it is enacted, that so soon as the bonds of the State shall have been issued for the first section of the road, they shall constitute a lien upon that section, including the road bed, right of way, grading and masonry, upon all the stock subscribed for, in the company, and upon the iron rails, chairs, etc., when purchased and delivered. The State of Tennessee shall, by virtue of these bonds, be invested with said lien or mortgage without a deed from the company, for the payment of the bonds, with the interest thereon, as the same becomes due.

Section fourth enacts that when said company shall have prepared a second section, or any additional number of sections, of twenty miles each, in the manner before mentioned, the Governor shall issue to them like bonds of the State of Tennessee for each section upon the same conditions; with the provision, that if the last section of the road shall be less than twenty miles, or if the railroad proposed to be constructed by any company hereinafter specified, shall be less than 30 miles in extent, bonds shall be issued for such section, for an amount proportioned to the distance to be constructed, but upon the same terms and conditions. After the whole road is completed, it is enacted that the State of Tenn. shall be invested with a lien upon it, of the nature specified in the third section. It is also enacted that after the Governor shall have issued bonds for the first section of the road, it shall not be lawful for the company to convey to any persons, or body corporate, any lien or incumbrance whatever, which shall have priority over, or shall come in contact with the lien of the State. In case any such lien is issued, it shall be considered null and void, as against said lien or mortgage of the State.

Section fifth declares that it shall be the duty of the company to deposit in the Bank of Tennessee, at Nashville, at least 15 days before the interest becomes due upon said bonds, an amount sufficient to pay such interest, including exchange and necessary commissions; and in case said company fail to deposit said interest, it shall be the duty of

the Governor to appoint suitable persons at the expense of the company, to take possession and control of the road, and all the assets thereof, and manage the affairs of the same, whose duty it shall be to give bond and security to the State of Tennessee for the faithful discharge of their duty, which shall be to receive the rents, issues, profits and dividends of said road, and pay over the same under the direction of the Governor, towards the liquidation of such interest. If the company refuse to deliver up their road to the persons appointed to receive it, the Governor is authorized to issue his warrant, directing the Sheriffs of the counties thro' which the road runs, to take possession of said road, with all the fixtures and equipments pertaining thereto, and to deliver the same to the appointed receivers, who shall hold it until the required interest is discharged.

In section sixth the Governor is authorised to institute a similar course of proceedings against the company if they refuse to pay any of the bonds when they fall due.

In section seventh it is enacted that, at the end of five years after the completion of their road, said company shall set apart one per cent per annum upon the amount of bonds issued to them, and shall use the same in the purchase of bonds of the State of Tennessee, which bonds the company shall pay into the treasury of the State, after assigning them to the Governor, and for which the Governor shall give said company a receipt, and as between the State and said company, the bonds so paid in shall be a credit on the bonds issued to the company.—And bonds so paid in, and the interest accruing thereon, from time to time, shall be held and used by the State as a sinking fund, for the payment of the bonds issued to the company, and should said company repurchase any of the bonds issued to it under the provisions of this act, they shall be a credit as aforesaid and cancelled.

By section eighth, the President of the company is required to make semi-annual reports under oath, to the Governor, until the completion of the road, setting forth, fully, the condition of the road; and after the completion he shall report annually upon the financial condition of the company, giving a statement of the trade and travel upon the road, the receipts and expenditures, etc., and said reports shall be consolidated every two years by the President of said company, and the consolidated reports shall be laid before the Governor by the 1st of September every two years after the completion of the road, and the Governor shall lay such report before the Legislature for its action, at the next meeting thereof after said report is made.

By section ninth all officers of the company are forbidden from engaging in any speculation, either directly or indirectly, along the line of the road, until after its completion, and every officer of the company, before entering upon the duties of his office, is obliged to take an oath that he will not violate the provisions of this act.

In section tenth it is enacted that the provisions of this act shall extend to and embrace the Chattanooga, Harrison, Georgetown and Charleston railroad company, the Nashville and North Western railroad company, the Louisville and Nashville railroad company, the South Western railroad company, the McMinnville and Manchester railroad company, the Memphis and Charleston railroad company, the Nashville and Southern railroad company, the Mobile and Ohio railroad company, the Nashville and Memphis railroad company, the Nashville and Cincinnati railroad com-

pany, the East Tennessee and Virginia railroad company, the Memphis and Clarksville and Louisville railroad company, and the Winchester and Alabama railroad company, so far as the main trunk roads to be constructed by said companies lie within the limits of the State of Tennessee; and that the said companies be entitled to all the privileges, and subjected to all the penalties contained in this act. Provided that this act shall not extend to or embrace any more of the Memphis, Clarksville and Louisville railroad than that part which lies between the Kentucky line and the Nashville and North Western railroad, or the Nashville and Memphis railroad. Provided further that this act shall not embrace the East Tennessee and Georgia railroad, unless said company extend their road so as to form a junction with the East Tennessee and Virginia railroad at Knoxville. In case this company fail to refuse to extend their road so as to make said junction, then all the rights and privileges are to be extended to any company that may be hereafter chartered, for the purpose of building a railroad to make such a connection.

It is enacted by section eleventh that the gauge of all the said railroads shall be the same as that of the Nashville and Chattanooga railroad, 5 feet, unless they connect with roads in other States of different gauge; also that the iron rails to be put upon these roads shall not be less than 80 tons to the mile if the U rail be used, and not less than 100 tons to the mile if the T rail be used.

Section twelfth gives power to the State of Tennessee to enact any law, which may be necessary to protect the interests of the State, and to secure the State against any loss, in consequence of the issuance of bonds, under the provisions of this act.

Section 13th enacts, that in case any company shall be convicted of having fraudulently obtained the issuance of bonds of the State, the Circuit Court of that county in which the place of business of the company is situated, shall adjudge and decree that said road lying in the State, with all its assets and property, shall be sold, and the proceeds be paid into the treasury, and it shall be the duty of the Comptroller to vest the same in stocks, creating a sinking fund, as provided for in the 7th section of this act. The company shall be divested of all its rights and privileges, and the stockholders in the road shall be individually liable to pay to the State the amount of the bonds thus fraudulently obtained.

Section fourteenth requires that the Governor shall appoint an agent for the State to attend said sale of the road, who shall protect the interest of the State, and if it be necessary, in order to protect the interest, shall buy said road in the name of the State, and shall appoint a receiver to take charge of it, and use it, as provided for in the fifth section of this act.

By section fifteenth, it is enacted that this act shall be deemed and taken to be a public act as to all purposes of notice; provided, that should any of the companies before mentioned have obtained *bona fide* subscriptions as specified in the 1st section, the State shall have issued bonds to them as hereinbefore prescribed, and provided that no company shall receive more than the amount per mile hereinbefore prescribed. Provided also that the provisions of this act shall only extend to one of the lines of railroad proposed to be constructed by the Nashville and North Western railroad company, and the Nashville and Memphis railroad company, between Nashville and the Tennessee river, and that the company first obtaining *bona fide* sub-

scriptions shall be entitled to the provisions of this act, for the whole distance from Nashville to its terminus on the Mississippi river, the other company having the power to connect with the one thus entitled at any point they may select, and being entitled to the provisions of this act only from the point of connection to their terminus on the Mississippi river. It is further provided that if the Louisville and Nashville railroad company locate their road through Sumner county, by way of Gallatin, then the provisions of this act shall not extend to the Nashville and Cincinnati railroad, and the charter granted to the last named company shall in that event be null and void; also that the State shall not issue bonds to the Louisville and Nashville railroad company, or to the Nashville and Cincinnati railroad company, unless one of the said companies shall agree to locate and extend their road across Cumberland river, at or convenient to Nashville or South Nashville, within ten years from the date of the passage of this act.

Section sixteenth gives power to all railroad companies, specified in this act, so to construct their roads as to cross or unite with each other, by the main trunks or branches; and declares that it shall be the duty of said companies to receive on their roads and branches the full loaded freight cars from each other, without charging for the transportation of the goods, etc. contained therein, any greater rate of freight than they charge for similar goods etc. in their own cars; provided no companies shall be compelled to receive such cars on their road, unless they are constructed with the same gauge and are of equal strength with their own cars.

Section seventeenth enacts that, in all cases where bonds may be issued to any of said companies, the State of Tennessee shall be entitled to two directors in each company, to be appointed by the Governor of the State, to which bonds may be issued.

It is provided by section eighteenth that when the Nashville and Chattanooga railroad company shall have completed 25 miles of their road, in addition to the 80 miles specified in the second section of the act, passed 4th February, 1848, chap. 169, then the Governor shall endorse and guarantee in the name of the State of Tennessee, the bonds of said company, to the amount of \$175,000, and, when another 25 miles shall be completed, the Governor shall indorse an additional amount of \$175,000, the bonds to be endorsed in the same manner as provided for in the said act of 4th February, 1848.

In section nineteenth it is enacted that, the contemplated aid shall only be extended to one of the roads chartered under the names of the Nashville and Southern railroad company, and the Tennessee and Alabama railroad company, with the provision that either road may intersect with the one first obtaining the necessary subscription, and may become entitled to the same provisions with that road, from the point of intersection to the destined terminus of the road; in the case of the Tennessee and Alabama railroad, from the point of intersection with the Nashville and Southern railroad, to the Alabama State line, and in the case of the Nashville and Southern railroad, from the intersection with the Tennessee and Alabama railroad, to the Tennessee river, the Mississippi State line, or any point between the two, which may be chosen as the terminus of said road. The two companies have also the power of consolidating their stock, if they deem it advisable, and upon such terms as

they may mutually agree upon. It is provided that, if the Memphis and Nashville railroad company do not comply with the requirements of this act, and complete 30 miles of their road within 4 years, or if the Nashville and North Western railroad company in like manner fail to complete 30 miles of their road in 4 years, then the Tennessee Central railroad company shall have all the privileges intended to be given by this act to those companies respectively, but the Tennessee Central railroad company shall be allowed two years longer time to complete their 30 miles of road. Any subsequent Legislature has the power to extend the term of 4 years in which to complete any 30 miles of said Nashville and Memphis or Nashville and North Western railroad companies. Each of said companies is required to appoint an agent to whom the bonds of the State shall be delivered, whose duty it shall be to control the bonds, and see that they are applied to the required purposes. The said agent before he receives the bonds of the State shall give bond and security that they shall be applied to the purposes aforesaid. It is further provided, that before any bonds be issued to any agent of any railroad, contemplated by this act, the President of such company shall first deposit in the office of the Secretary of State a full and accurate list of all the stockholders, with the sums subscribed by each stockholder.

Section twentieth and last enacts; that no road embraced in this act shall be entitled to State aid unless it shall within 4 years complete at least one section of 30 miles or the whole length of the road, if less than 30 miles long.

Ohio.

Eaton and Hamilton Railroad.—This road extends from Hamilton, Ohio, through Eaton, the county seat of Preble county, to the west line of the State, where it connects with the Richmond and Miami railroad, running from the State-line west, to Richmond, in Wayne co., Ia.

The Richmond and Miami railroad company was organized for the purpose of constructing the six miles from the State-line to Richmond; and when it is completed, it will be consolidated with the Eaton and Hamilton railroad, making one continuous line from Hamilton to Richmond, of 44 miles, and including the Cincinnati, Hamilton and Dayton railroad, the distance from Cincinnati to Richmond will be 69 miles.

At Richmond the Eaton and Hamilton railroad will unite with the New Castle and Richmond road extending to Logansport.

The distance from Richmond to Newcastle is 27 miles, and from Newcastle to Logansport, by way of Anderson and Kokomo, is 80 miles, making the distance from Cincinnati to Logansport, by a continuous railroad, of the same gauge, 176 miles.—From Logansport to Chicago, by the line of road which will probably be adopted, it is about 113 miles, making the whole distance from Cincinnati to Chicago 289 miles.

The Eaton and Hamilton railroad will also be connected at Richmond with the Indiana Central railroad, by which means Cincinnati will be brought into communication with the cities of Indianapolis, Terre Haute and St. Louis. This road will soon be completed, and will bring to the Eaton and Hamilton railroad a large amount of through traffic.

The Cincinnati, Hamilton and Dayton railroad company have agreed to furnish the necessary equipment, and run the Eaton and Hamilton

railroad when it is finished, so that regular daily trains will immediately run between Cincinnati and Richmond.

The cost of the road from Hamilton to Richmond a distance of 42 miles, is estimated at \$713,103 35, including all expenses and interest on bonds up to July next.

The resources of the company are \$532,767 00. Deduct this amount from the estimated cost of the road, and there is left a sum of \$180,336 35 to be raised by sale of bonds. The amount of work done on the road up to 1st March, 1852, including iron and materials for the road, amounted to \$498,161 37. The work remaining to be done amounts to \$178,243 11.

The contractors are pressing forward the work vigorously. They intend to complete the division from Hamilton to Eaton, and to open it for use as early as June next. The 17 miles from Eaton to Richmond will be finished in October, if the necessary funds are obtained.

In order to finish the road as soon as possible, and furnish it with the necessary equipment, the company have issued 7 per cent bonds to the amount of \$300,000, payable in 15 years, and convertible within five years, which are secured by a mortgage on the road, with its superstructure, fixtures, etc.

The whole liens upon the road, including the loan of Cincinnati, (\$150,000) which has 27 years to run, at 6 per cent, and the \$300,000 bonds, just mentioned amount to only \$450,000, leaving a margin of nearly \$300,000. When the proceeds of the loan now proposed are expended on the road it is the opinion of the company that the security will in fact be double the amount of the mortgage debts.

It is proposed to sell only \$100,000 of the bonds at present, leaving the residue to be sold during the year, after the road from Hamilton to Eaton shall be finished and in use, and as the work progresses between Eaton and Richmond.

The prospects of the road are considered by the company to be very favorable. The value of the taxable property of the three counties of Hamilton, Butler and Preble in Ohio, which will be tributary to this line, amounted in 1851 to \$71,352,959. In the two last counties alone, there were produced in 1850 more than 1,000,000 bushels of wheat and 3,300,000 bushels of corn.

Hamilton, situated upon the Cincinnati, Hamilton and Dayton railroad, and at the southern end of the Eaton and Hamilton railroad, is a flourishing town, containing, with Rossville on the opposite side of the river, a population of six thousand. A hydraulic power has been created at Hamilton, which is not surpassed by any water power in the State.

The Great Miami river has been brought upon the town plat by a large canal four miles in length. The whole water of the river can be used over a fall of thirty feet. Several large paper mills, foundries, cotton mills, machine shops, flouring mills, and other manufacturing establishments, are now in successful operation. The advantages possessed by Hamilton for manufacturing, and its proximity to Cincinnati, must make it the Lowell of the west.

At Richmond, and along Seven Mile Creek, and White Water, there is a large amount of water power, which might be brought into use. At present, quite a number of flouring mills and other manufacturing establishments have been built upon these streams, and there will probably be many more erected.

From these sources the Eaton and Hamilton railroad will derive a profitable local traffic, and from the important connections it will form with other roads, a through traffic no less profitable may be expected.

The Newcastle and Richmond railroad, is the most important connecting line. This road runs from Richmond to Newcastle, and from thence to Logansport, on the Wabash river. At that place it connects with the Logansport and Lake Michigan railroad, running from Logansport to Chicago. The distance from Cincinnati to Logansport, as has been already stated, is 176 miles, and to Chicago, 289 miles.

The whole line from Richmond to Logansport is now under contract, and stock sufficient to ensure the speedy construction of the road has been subscribed. The road from Logansport to Chicago has not yet been put under contract, but there is no doubt it will be constructed, now that the line from Cincinnati to Logansport is determined upon.

The immense business that will be transacted between Cincinnati and Chicago is a sufficient guarantee for the success of any line of road connecting those two cities, and as the Eaton and Hamilton railroad will form an important part of the proposed line between Cincinnati and Chicago, there is every reason to believe that it will derive a profitable business from its position.

Another and no less important connection for the Eaton and Hamilton railroad is that which it will form with the Indiana Central railway. In conjunction with that road it will form the best route between Cincinnati and St. Louis, and the travel that will pass from one city to the other will be attracted to it in preference to other routes. The beauty, high state of improvement, and great wealth and population of the country through which the Indiana Central railroad passes, as well as the favorable alignment of the road, will render it an important line, and the connection which the Eaton and Hamilton railroad will form with it, will be of advantage to both roads.

From these circumstances, the company argue a brilliant future for their road, and we see no reason why they should be disappointed in their expectations.

To Contractors.

We learn that the Illinois Central R.R. Co. have advertised the grading, masonry, bridging, superstructure, or either of them, with or without materials, on the following divisions of the Illinois Central railroad, to wit:

First division, from Cairo to Big Muddy river.....	60 miles.
Second division from Big Muddy river to Township No 1, north of the base line of the 3d principal meridian.....	53 miles.
Sixth division from Bloomington to the Illinois river.....	60 miles.
Eighth division from Freeport to Dubuque	67 miles.
Ninth division, from Chicago to Kankakee river.....	55 miles.
Tenth division, from Kankakee river to Urbana.....	70 miles.

The proposals must be for the entire length of each division, and will be received at the office in Chicago, as follows:

For the ninth and tenth divisions, until April 15, 1852, at noon.

For the sixth division, until April 22, 1852, at noon.

For the eighth division, until April 29, 1852, at noon.

For the first and second divisions, until May 27, 1852, at noon.

Profiles, plans, and approximate estimates of quantities, and specifications, will be ready for inspection, and blank forms for proposals, and statements of the mode and terms of payment, will be furnished at the office, over the New York and New Haven railroad passenger Station, No. 33 Canal st., New York city, and at the office of the Chief Engineer, R. B. Mason, in Chicago, Illinois, on and after March 25, 1852.

Railroad Connection between Lake Michigan and the Gulf of Mexico.

The announcement that the Illinois Central railroad company are about to place some portions of this line under contract, naturally turns our attention to the subject of a railway connection between Lake Michigan and the two great gulf cities of Mobile and New Orleans. Lake Michigan being the western limit of lake navigation, there must always exist a very large commerce between it and the gulf of Mexico. Upon the latter are produced in abundance the fruits of the tropics, and upon the lake, all those that belong to the temperate, also to high northern latitudes. The natural direction of commerce is between the two, and in this respect coincides with the existing routes. We propose briefly to examine this subject, for the purpose of developing the route which is likely to become the medium of communication between these important termini.

The Illinois Central railroad, in connection with the Mobile and Ohio, has been regarded as the shortest and most appropriate route between the lake and the gulf, simply from the fact that public attention has been called to this route, through the efforts of the above companies, and because no other competing lines have been proposed. The merits of the above as a through route, rest only upon an assumption of its superiority. This assumption can easily be disproved by pointing out another, which has the advantage, not only in distance, but still more so in all its attractions. The conditions that determine the best route between Chicago and the gulf are, first, the physical characteristics, second, its through business, and third the local attractions. A business man in passing from one to the other, would take the route that would carry him through the leading commercial points. The tourist and pleasure traveller would take the routes most inviting for their natural features, and the objects of interest to be met with.—The merchant would use that as the channel of commerce, which could carry at the cheapest rates, and this, all other things being equal, would depend upon length of lines, amount of grade and curvature.

Now the route between Chicago and Mobile, New Orleans, that fulfills this condition in preference to any other, is one, running from Chicago to the Wabash river, either at Lafayette or Terre Haute, thence down the valley of the Wabash to Evansville, thence by the proposed Henderson and Nashville railroad to Nashville, thence by the proposed road from Nashville running in a southwesterly direction to the bend of the Tennessee river, or to Florence, to connect the Mobile and Ohio, and New Orleans and Nashville railroad, of the latter of which, the above named road from Nashville is to form a part. Let us see in what constitutes the superiority of this route.

The Wabash valley and river are the most distinctive features of Western Indiana and Eastern Illinois. The river was formerly the principal, and is now an important channel for the commerce of the portions of the States named. The facilities

afforded by the river have been vastly increased by the Wabash canal, which follows its bank for nearly its entire length. The two are the outlets of a very extended section of country. Upon their banks we find the depots of the produce, and the great points of trade, for the adjoining States. Lafayette, Terre Haute, and Evansville, which may be considered a Wabash town, are already large places, and are rapidly taking high rank among the leading western towns. On going south from the Ohio, the first town of any considerable importance is Clarksville, Tennessee, which is a large depot for the produce for northern Tennessee and southern Kentucky. But the most important and attractive place is Nashville, the political capital of the State, and which must always remain one of its largest towns. From Nashville to Mobile and New Orleans, no very important place is met with. As far as leading points and the character of the country are concerned, it certainly will compare favorably with the more western route, until they shall become united in one in northern Alabama, or Mississippi.

We believe that no other route in the west can be presented more important in all its aspects, or more inviting both to the business man and the traveller. The road traverses a most beautiful and productive country; the great depots of trade and commerce, and of course the most populous cities between the Miami canal on one side, and the Mississippi river on the other. It possesses superior advantages in the numerous lines of railroad it will intersect with, affording the traveller the opportunity of moving in any direction he may choose. At Nashville a choice of routes is presented between the southern Atlantic and gulf cities.

Memphis and Charleston Railroad.

The Huntsville Advocate contains a brief statement of the President of this company, Geo. P. Birne, which presents a most gratifying report of the progress of the work. The road from Crow Creek to Tuscaloosa has been placed under contract, and the prospect for an early completion of the work is indeed cheering. We give the following extracts for the information of our readers.

"It is known to the stockholders, that, heretofore, purchases were made of the "Memphis and LaGrange company," and the State of Tennessee of their interest in the Memphis and LaGrange track, and also the interest of the "Tennessee Valley railroad company," with all its rights and privileges in what was formerly known as the Tuscaloosa, Courtland and Decatur railroad. That these roads were made a part of the main trunk of the Memphis and Charleston railroad,—that iron rails of the most approved T. pattern, to the amount of 8,500 tons, were brought for the purpose of constructing these roads. That contracts have been entered into for the purpose of putting them in running order.

"It is now announced that the estimated cost of the LaGrange portion, in running order, was found to be \$360,000, the Valley railroad \$276,000, making the aggregate cost of these 92 miles of the Memphis and Charleston railroad, \$636,000. That the grading, cross-ties, Engines, burden cars, laying the track, etc., contracted for at prices known, insures the completion of that portion of the road within the estimate of the engineer. And the question is confidently asked where can 52 miles of railroad in the United States, through so productive a country, be built for the same money!"

The board of Directors at a late meeting ordered that contracts be entered into for the grading, etc., of that portion of the said road from its intersection with the Nashville and Chattanooga railroad to Decatur, and sections Nos — west of Tuscaloosa. For all of which bids were made [including the bridge at Decatur] by responsible contractors. That the President directs a survey to be made from LaGrange, Tennessee, to the most suitable point on the Tennessee river in said State, and from

a suitable point west of Tuscumbia to the most suitable point on the Tennessee river in the State of Alabama, below obstructions to navigation, and then to ascertain the most practicable way of connecting these two points on the Tennessee river.

Massachusetts.

Barre and North Brookfield Railroad.—The Barre papers contain an account of a meeting of committees of the Worcester and Western railroads, with delegations from Barre and North Brookfield, to take into consideration the building of a branch road from Barre to intersect with the Western railroad at Brookfield. It was represented that the cost of construction would be about \$200,000, one-half of which sum was pledged from the towns along the line, if the two corporations represented would raise the remainder. The Patriot informs us that those corporations have so agreed, and that a petition for a charter has been presented to the Legislature with high hopes of its being granted.

Pennsylvania.

Cumberland Valley Railroad.—We learn from the seventeenth annual report of the President, that since the re-construction of this road, the financial condition of the company has been much improved. The rates of passenger fare for the past year were reduced about 30 per cent., and the tolls for freight were very considerably diminished. The result is as follows:

Amount of receipts for freights and tolls	
in 1851.....	\$108,199 56
" in 1850.....	92,755 78
Difference in favor of 1851.....	\$15,443.78
Number of tons carried in 1851.....	51,674
" " " " in 1850.....	37,574

Difference in favor of 1851..... \$14,100
The total receipts of the company for the year 1851 were \$199,754.06. The current expenses for the same period were \$40,287.15; leaving a balance of \$159,466.91.

The company have during the past year added to the motive power of the road by the purchase of two new locomotives, weighing 8 tons each, at a cost of \$7,644.38. To meet this expense, together with that of completing the relaying of the road, the board of managers authorized the president at the beginning of the year to sell at par 300 shares of first preferred stock, which had been originally authorised for the reconstruction of the road, and which remained undisposed of. It was found necessary to sell only 131 shares, leaving the residue to be disposed of when the exigencies of the company may require it.

The contract made with the York and Cumberland railroad company to furnish the latter with motive power, has been rescinded, on account of the insufficiency of the locomotives of the Cumberland Valley railroad to surmount the high grades of the York and Cumberland road. The Baltimore and Susquehanna railroad company, who are possessed of a heavier motive power, have taken up the contract, and have performed the work thus far satisfactorily to all parties.

The company state that the facilities for the advantageous transaction of their business are not as yet complete. It has long been deemed necessary to erect substantial warehouses at several points, and the company hope they will soon be enabled to build them. Thus far they have spent the residue of their earnings, after the payment of current expenses and dividends upon preferred stock, in improving their road, and putting it in a condition

to be worked efficiently and with economy. Now, that their road is in good order they will probably be able soon to make all other necessary improvements, and to prepare themselves in every way for the increase of business which they have good reason to expect.

The officers of the road for 1852, are:

President: Frederic Watts.

Managers: William S. Cobean, Wm. M. Biddle, D. O. Gehr, George Cadwalader, Wm. M. Henderson, Henry J. Biddle, Frederic Byers, J. N. Hutchinson, Daniel Tyler, James McCormick, David Lapsley, J. P. Hutchinson.

Secretary and Treasurer, Edward M. Biddle.

Ohio and Pennsylvania Railroad.

The ceremony of opening this road to *Massillon*, 108 miles from Pittsburg, took place on the 11th instant, with all those manifestations suited to the occasion. The excursion party, consisting of the directors of the road, accompanied by a numerous body of the leading men of Pittsburg, and of the counties contiguous to the line of the road, were entertained by a grand dinner, provided by the authorities of *Massillon*, at which a number of speeches were made, and the following, among other deservedly complimentary toasts, were drunk:

The Ohio and Pennsylvania Railroad.—Its commencement July 4th, 1849, and the completion of one hundred and eight miles from Pittsburg to *Massillon* within the brief period of thirty-two months, furnish substantial proof of the energy and efficiency of the President and directors of the company.

S. W. Roberts, Esq., Chief Engineer of the Road.—By the skill, energy, promptitude, and fidelity, exhibited in its construction, he may well challenge the world, both for expedition and superiority of structure.

Jesse R. Straughan, Esq.—In the efficient discharge of his duties, and gentlemanly deportment as Local Engineer, is eminently entitled to the thanks of the company and the confidence of the public.

Toasts complimentary to Arnold Lynch, and Zadock Street, Esqs., directors, to Mr. Warner, superintendent of the first division of the road, and to other leading men connected with the enterprise, were given, and, as well as those already quoted, were received with great enthusiasm, and the day wound up in the happiest manner for all concerned.

We are happy to add our meed of praise to that already bestowed upon those entrusted with the management of this great work, for the energy and ability with which they have carried it forward, which is not only to be an inestimable boon to the region it traverses, but which has contributed, by the reputation it has acquired, not a little towards the success of similar western projects. The Ohio and Pennsylvania railroad company has fairly earned the reputation it enjoys, which has caused its securities to be eagerly sought for, not only in this country, but in Europe.

We confidently expect that the close of the present year will witness the opening of the entire line.

North Carolina.

The Wilmington and Manchester Railroad.—The Wilmington, (North Carolina,) Commercial says: Twenty-five miles of the Wilmington and Manchester railroad will soon be in operation. On and after the first of April, the mail and passenger trains on the Wilmington and Manchester railroad will run to Mary's station, twenty-five miles from its junction with the Camden Branch railroad.

To Railroad Contractors.

OFFICE ILLINOIS CENTRAL R. R.
New York, March 15, 1852.

SEALED PROPOSALS will be received at the Office of the Chief Engineer, in the city of Chicago, Illinois, for the Grading, Masonry, Bridging and Superstructure, or either of them, with or without materials, on the following Divisions of the Illinois Central Railroad, to wit:

First Division, from Cairo to Big Muddy River.....	60 miles.
Second " " Big Muddy River to Township No. 1, north of the base line of the 3d principal meridian.....	53 "
Sixth " " Bloomington to the Illinois River.....	60 "
Eighth " " from Freeport to Dubuque.....	67 "
Ninth " " Chicago to Kankakee river.....	55 "
Tenth " " Kankakee river to Urbana.....	70 "

The proposals must be for the entire length of each Division and will be received at the Office in Chicago, as follows:

For the ninth and tenth Divisions, until April 15th, 1852, at noon.

For the sixth Division, until April 22d, 1852, at noon.

For the eighth Division, until April 29th, 1852, at noon.

For the first and second divisions, until May 27th, 1852, at noon.

Profiles, Plans and approximate Estimates of quantities will be ready for inspection, and blank forms for proposals and statements of the mode and terms of payment will be furnished at the office, over the New York and New Haven railroad passenger station, No. 33 Canal Street, New York city, and at the office of the Chief Engineer in Chicago, Illinois, on and after March 25th, 1852. The same, so far as relates to the first and second Divisions, may also be found at Jonesboro', Union Co., Illinois—to the sixth division at Lasalle, Lasalle County, Illinois—and to the eighth Division, at Freeport, Stephenson County, Illinois.

Separate proposals will also be received at Chicago, until the 27th of May, for furnishing Ties, Plank, Bridge Timber and Piles, for the whole or any part of the road.

Specifications may be obtained on and after the 1st of April, 1852, by application at the office of the Chief Engineer, in Chicago.

Satisfactory references will in all cases be required.

R. B. MASON,
Engineer in Chief Illinois Central R. R.

CHILLED WHEELS FOR RAILROAD CARS AND LOCOMOTIVE ENGINES.

Bush & Lobdell,

Wilmington Delaware,

A RE prepared to execute, promptly, orders to any extent, for their celebrated Wheels, (with or without axles,) the character of which is well known.

For the information of parties interested, they make known that George W. Eddy, of Waterford, N. Y., Lyman Kinsley, of Canton, Massachusetts, and Bush & Lobdell, of Wilmington, Delaware, are the only persons authorized to manufacture Wheels, by using the Elgar Patent, the Eddy Patents, and the Kinsey Patent.

Wilmington, Del., March 1852.

Freight Cars.

50 Eight Wheeled platform cars made in the most thorough manner of the best materials and style of construction. India-rubber springs. For sale, to be delivered immediately.

ESSEX CO.,

Lawrence, Mass.

March 23 t.

GORDON McCAV, Agent.

Lithographic Printing,

169 Chestnut St., Philadelphia,

A. BRETT & CO.

Drawings of Landscapes, Buildings, Architecture, Ornaments Portraits, etc., printed plain and in colors. Title pages, embossed labels, maps, cards, bill heads, as well as transfers from steel and copper, executed in superior style.

Day's Superior Car Springs.

RAILROADS and car builders are respectfully invited to read the following letter from Messrs. Wharton and Petsch, of Charleston, S. C., the most extensive car builders in the south, as to the superiority of my Springs over those of Ray's. As this opinion of those gentlemen is based upon a test made of these Springs on the same road side by side, further comment is unnecessary.

All orders promptly filled with an article superior to Ray's at fifty cents a pound.

HORACE H. DAY,
23 Courtlandt Street, N. Y.

March 23, 1852.

Charleston, S. C., March 14, 1852.

HORACE H. DAY, New York:

Dear Sir—An advertisement having appeared in our papers for the purpose of assisting the New England Co. Spring co. to maintain a monopoly and injure you in the sale of your springs in our section of country, we deem it but an act of justice to ourselves, (who have been using your springs for some time past in our business), to you and to all interested, to state facts which have come under our notice as to the durability of your springs, in connection with those of the New England car spring co. Many of the above company's springs have been in use on one of the largest railroads in our State, and have proved to be inferior to yours; in many instances they have burst open with the weight of loaded cars, and once with the weight of a car unloaded, when on the other hand we have never known yours to fail with any weight they have been pressed with.

The above railroad has a number of your springs in use, and it was through their foreman of repairs in car shop we were induced to try them; he uses no other when yours are to be had. We have never heard of any freezing in our late cold weather, nor are they affected by the heat of our southern summers. A consideration of no small magnitude is that your springs are 30 per cent cheaper in price, though the price would not govern us in our preference were not your springs superior.

Desiring that railroad companies and car manufacturers should not be imposed on by a monopoly to extort from them 75 cents per lb. for an article not as good as you are selling for 50 cents.

Oblige us by filling our last order at your earliest convenience, and wishing you every success, we are, very respectfully, yours,

WHARTON & PETSCH,
Car Manufacturers, Charleston, S. C.

Notice to Contractors.

PROPOSALS will be received until the 4th of May next, at the Office of the Engineer of the Company, in Pittsburgh, for the Grading and Bridging on eight miles of the Pittsburgh and Steubenville Railroad, from Pittsburgh to Campbells run, comprising a tunnel 500 yards long, and some heavy sections; and for such other work on the line as may then be ready for contract. Information respecting the work may be obtained at this office, or from W. M. Roberts, Consulting Engineer, Marion, Ohio.

By order of the Board.

D. MITCHELL, Jr.,
Chief Engineer.

Engineer's Office, Pittsburgh,
March 22, 1852.

Railroad Commission Agency.

THE Subscriber offers his services to Railroad Co's and Car Makers for the purchase of equipment and furniture of roads and depots and all articles and materials required in the construction of cars, with cash or approved credit. No effort will be spared to select the best articles at the lowest market price.

He is sole Agent for the manufacture of the ENAMELED CAR LININGS, now in universal use. The best Artists are employed in designing new styles, and he will make to order pieces with appropriate designs for every part of the car, in all colors, or with silver grounds and bronzed or velvet figures.

He is also Agent for Page's Car Window Sash Fasteners, which is preferred by all who have used it to any other.

CHARLES STODDER,

75 Kilby st., Boston.

June 20, 1851.

3m.

Boiler Plates and Axles,
MADE of the celebrated *Low Moor Iron*, are offered for sale at the manufacturer's prices by WM BAILEY LANG,
Jan 22, 1852. No. 9 Liberty Square, Boston.

Rubber Springs.

THE New England Car Spring Co. have just received the following letter from Mr. Bird, of the highly respectable firm of Bird & Weld, of Trenton, N. J., which they are induced to publish, as it somewhat exposes the very transparent affidavit of Mr. Israel Tucker, lately published by Mr. Day:

Trenton, March 10, 1852.

F. M. RAY, Esq.:

Dear Sir—My attention has lately been called to the affidavit of Israel Tucker, lately published in the Trenton papers, in which he swears that you made H. H. Day, through him, sundry large offers to compromise the law suits now pending between Mr. Day and Charles Goodyear. I must say that I think there is some mistake on the part of Mr. Tucker, for the reason that Mr. Day has several times requested me to use my influence with the rubber manufacturers to buy him out of the business, and I have as frequently tried to induce those parties to buy him out, but have always failed—not one of them being willing to pay Mr. Day one cent to relinquish the business. The last time Mr. Day applied to me for this purpose was just before the patent suit between him and Mr. Goodyear was expected to be tried in Boston. We met on board the steam boat between Newark and New York, on the day the bridge over the Hackensack river was burned. In that conversation he was very particular to ask me to see the parties and say to them that he would be very glad to sell out his whole interest in the rubber business, including all his machinery, and all his patents, and his business stand in New York; would give bonds to leave the business and not go into it again, and would allow a judgment to be taken out against him, so that an injunction could at any time be taken to stop him or any other person who should attempt to infringe upon the patents, and would also agree that all his counsel should become the counsel for the other parties. I immediately called upon yourself, Mr. Charles Ely, Mr. William Judson, Mr. John Greacen, Junior, Mr. R. Ford, and Mr. Candee, and tried very hard to bring about a settlement. I first called upon you, and afterwards upon the others, and got but one answer from all the parties, that "they would not pay Mr. Day one cent to leave the business to-morrow; if the patents were good they meant to sustain them, if not, the sooner they went down the better." Your answer was instantly given, "that you would not have anything whatever to do with any compromise with Mr. Day upon any terms whatever." It is for these reasons that I think Mr. Tucker was mistaken in his affidavit that you made him large offers to settle this matter, in order that you and your associates might have a monopoly in the business.

In haste, yours truly,
J. W. BIRD.

East Tennessee and Georgia Railroad.**TO MASONRY, BRIDGE, AND GRADING CONTRACTORS.**

SEALED PROPOSALS will be received at the Railroad Office at Athens, Tennessee, until the 21st day of April next, for the Masonry and Superstructure of the Bridge across the Tennessee River at Loudon. The Bridge will be 75 feet above low water, and 1600 feet long.

The Piers and Abutments to be First Class Masonry, laid in Hydraulic Cement, and will contain about 5000 cubic yards.

At the same time and place, proposals will be received for the Grading and Masonry of thirty miles of Road from Loudon to Knoxville; a portion of the work is heavy, and the whole desirable for contractors.

Profiles, Plans and Specifications will be ready for examination at the Engineer's Office at Loudon on and after the 10th day of April.

By order of the Board of Directors.
THOS. H. CALLAWAY, Pres.
Railroad Office, Athens, Tenn.,
1st March, 1852.

LOWMOOR LOCOMOTIVE TIRES.

THE Subscriber, sole agent for the Lowmoor Co., is prepared to take orders for this superior description of tires, which are furnished, bent, welded and blocked to any dimensions, having but one weld, and at a cost to the importer of less than ten cents per pound for the heaviest weights.

WM. BAILEY LANG.

Boston, November 29th,

lm

India-rubber Car Springs.

THE New England Car Spring Co. are in the receipt of testimonials of the quality of their Springs from sources which can be relied on. The following is from Mr. G. W. Whistler, Jr., Supt. New York and New Haven railroad:

New York and New Haven Railroad,
Supt's. Office, New Haven, March 12, 1852.

To Mr. F. M. RAY, 104 Broadway, N. Y.:

In answer to your letter of yesterday, I would say, that we have used your India Rubber Springs, under our care, with great success. We have had an opportunity of trying other India Rubber Springs in large quantities, but have never found them to equal your Springs.

Very respectfully, your obedient servant,
[Signed] GEO. W. WHISTLER, Jr., Supt.

The following is from Wm. Ettinger & Co., of Richmond, Va.:

Richmond, March 13, 1852.

F. M. RAY, Esq.:

Dear Sir:—In reply to yours of the 11th inst. we take pleasure in stating that we have during the past 18 months applied your Springs both for bearing and buffer Springs, to some 65 freight and passenger cars, and have found them to give the utmost satisfaction to the companies on whose roads they have been placed, and we shall continue to use them in preference to any others which we have seen.

Yours respectfully,
WM. ETTINGER & CO.

HUDSON RIVER R.R. OFFICE, 68 WAREN ST.
New York, March 5, 1852.

F. M. RAY, Esq.:

DEAR SIR: Since my connection with this road, I have watched with much interest the matter of Rubber Springs for railroad cars. I have no hesitation in saying that your Spring is incomparably the best article which I have seen or used. I have tried others and found them to fail under pressure, or to freeze in cold weather and become worse than useless. I should prefer using yours at double their cost, to employing any other rubber spring which has fallen under my notice. Your Springs possess the rare quality of preserving their elasticity at all temperatures.

Yours, etc. OLIVER H. LEE,
Late Sup't Hudson River Railroad.

Rochester Scale Works.

THE Subscribers are prepared to furnish upon order RAILROAD SCALES of every size and description.

Railroad Track and Depot Scales.

Hay, Coal and Wheat Scales.

Dormant and Portable Scales.

Canal Weigh Lock Scales—150 to 600 tons.

Warehouse Trucks, a superior article.

Manifest Presses, and Copying Books.

Every article made of the best material and warranted. The superiority of these Scales has given them a reputation world-wide. We are prepared to fill orders promptly. Persons wishing any of the above articles would do well to give us a call before purchasing elsewhere. Reference is made to the following railroads that have them in use:—

New York and Erie,	Michigan Central,
New York and Harlem,	Mad Riv. & Lake Erie,
New York and N. Haven,	Patterson & Hudson R.,
Sand'ky, Mans. & New'k,	Cin., Ham. and Dayton,
Ind. and Bellefontaine,	Buffalo and Rochester,
Syracuse and Utica.	Rochester & Syracuse,
Columbus and Xenia.	Louisville & Frankfort,
Lexington and Frankfort,	Chicago and Galena,
Hillsboro' and Cincinnati,	Dayton and Western,
Greenville and Miami,	Central Ohio,
Cayuga and Susquehanna,	Chemung,
	Illinois Coal Co.

The Hon. Canal Commissioners, and Engineers of the Erie Canal Enlargement.

DURAYEE, FORSYTH & CO.

Rochester, N. Y.

WILLIAM T. PINKNEY, Jr., 166 Pearl St., N. Y.

THOMAS ELDER, St. Louis, Mo.

RAYMOND WARD & CO., Chicago, Ill.

W. A. OTIS & CO., Cleveland, Ohio.

March 21, 1852.

GLENDO

LOCOMOTIVE TIRES,

FOR SALE BY

GEORGE GARDNER & CO.,

No. 5 Liberty Square,

BOSTON.

Rubber Springs.

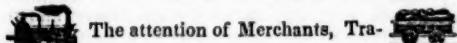
TO RAILROAD COMPANIES, CAR BUILDERS AND OTHERS.—In an advertisement in the last Railroad Journal, Mr. Day endeavors to enlist the sympathies of the consumers of India-rubber Springs in his favor, by endeavoring to persuade them that he is their champion against monopoly, forgetting, I presume, that he has on more than one occasion offered to compromise with me, and using, as an argument, that in such case I could obtain the entire monopoly of the business, and sell the Springs at any price, which I declined to do—relying upon my rights and the superiority of my Springs.

Mr. Day has for months past been trumpeting to the world the fabricated statement that the American Institute in October last, awarded to him the first premium for the best India rubber Car Spring. The premium for the best India-rubber Spring with the diploma was awarded to myself. Mr. Day now turns upon the American Institute and insinuates that that body has been guilty of foul play. I call the attention of the public both to Mr. Day's attempted deception, and to the mode in which he now tries to get out of the scrape when convicted of it, by impeaching the character of the American Institute, the very umpire selected by himself.

Neither Day nor Fuller have a shadow of a right to the patent for an India-rubber Spring, nor to the composition of which it is made; and all Railroad companies and responsible parties, infringing my rights, (which are now vested in the New England Car Spring Company,) will be prosecuted.

F. M. RAY, 104 Broadway,
New York.

New York and Canada.


The attention of Merchants, Traders and travellers, is directed to the facilities now afforded for the conveyance of freight and passengers direct from this city to Montreal.

The Champlain and St. Lawrence Railroad Company having opened their road from Rouse's Point to South Montreal, the only link before wanting to connect New York with Montreal by a continuous railroad, has been supplied.

Passengers leaving New York in the morning, sleep comfortably on the way, and arrive at Montreal at half-past four the following afternoon, reducing the travelling time to little more than twenty hours.

Freights are carried with the greatest care and dispatch, at greatly reduced rates.

After the opening of navigation, passengers will be conveyed from one city to the other by day light.

New York, Feb. 13, 1852.

Notice to Contractors.

OFFICE OF MORRIS AND ESSEX R.R. CO.
Newark, N. J., February 10, 1852.

SEALED PROPOSALS will be received at the office for the grading, masonry and bridging of that part of the extension of the road of this Company to the Delaware River, between its present terminus at Dover and Hackettstown, (a distance of eighteen miles), until Saturday, the 20th day of March next.

Maps, profiles, plans and specifications can be seen at the office of the Engineer at Dover, until the time above named.

J. B. BASSINGER,
Chief Engineer.

CAUTION.

India-rubber Car Springs.

A N advertisement having lately appeared in the public papers, signed H. H. Day, claiming to have received from the American Institute, the premium for the best India-rubber Car Spring, the subscribers think it well for the satisfaction of their friends and those interested, as well as for the purpose of exposing false statements, to publish the following Diploma, lately awarded to F. M. RAY, the inventor of the Spring. The original of which can be seen at the office of the company, No. 104 Broadway, New York.

DIPLOMA—Awarded by the American Institute to F. M. RAY, for the best India rubber Car Spring. A Gold Medal having been before awarded.

Signed, JAMES TALLMADGE,
President.

N. MEIGS, Recording Sec'y.
ADONIRAM CHANDLER, Cor'g. Sec'y.

New York, Oct., 1851.

New England Car Spring Co., No. 104 Broadway,
New York.

India-Rubber Car Springs.

THE following letter has been received by the New England Car Spring Company, from one of the largest and most respectable Car Builders in Philadelphia, to which the attention of Railroad Companies, Car Builders, and others, interested in the use of India-rubber Car Springs, is directed:

PHILADELPHIA, Jan. 28, 1852.

F. M. Ray, Esq., President of the New England Car Spring Company. Dear Sir:—Having seen an advertisement in the Railroad Journal, of a Premium India-rubber Car Spring, made by H. H. Day of your city, we ordered some of them for the purpose of giving them a trial; but during the last severe cold weather we found some of them that were exposed to the cold, frozen completely stiff, and solid, their elasticity being entirely destroyed. And fearing to use springs affected by any extremes of cold or heat of the atmosphere, we shall have to return them, and depend upon you for springs as heretofore, believing yours to be the only reliable India-rubber Springs, under all circumstances, and in all states of the atmosphere, that have yet come under our notice.—Having used many hundreds of your springs during the three years last past, we have never known one of them to fail. And as we are determined to use none but the best material of every description in our business, you will oblige us by filling our orders for springs as soon as possible. Very respectfully,

Signed. KIMBALL & GORTON.

Our object in publishing the above is to prevent any of our other customers being misled by parties advertising to supply cheap India-rubber Springs.

NEW ENGLAND CAR SPRING CO.,
104 Broadway.

To Inventors.

\$3,000 REWARD—To MECHANICAL INVENTORS AND OTHERS.—In view of the many accidents occurring on Railroads, and with a desire to promote the safety and comfort of railway passengers, the undersigned proposes to offer for competition the following premiums:

\$1,500 for the best invention for preventing loss of life from collisions, and from the breaking of axles and wheels.

\$800 for the best method of excluding dust from cars when in motion.

\$400 for the best railroad brake.

\$300 for the best sleeping or night seat for railroad cars.

The premiums will be open for competition, from this date until the next annual Fair of the American Institute, where they are expected to be on exhibition: and no invention already introduced to the public will be entitled to compete for the prizes. It must be understood that these inventions are to be such as can be adopted and put into general use, the inventors in all cases retaining their right to patents.

The above will be left to the decision of competent judges, appointed by a Committee of the American Institute, to whom all applications on the subject must be addressed.

F. M. RAY.

New York, January 1, 1852.

To Engineers.

A NEW WORK on the Marine Boilers of the United States, prepared from authentic drawings, and illustrated by 70 engravings, among which are those of the fastest and best steamers in the country, has just been published by B. H. Bartol, Engineer, and is for sale at the store of

D. APPLETON & CO.,
Broadway

September 1, 1851.

Railroad Iron.

1000 TONS of an approved T pattern, 59 lbs. per lineal yard, ready for delivery. Also, 1500 tons to arrive in March and April next. Apply to

DAVIS, BROOKS & CO.,
28 Beaver street.

January 31, 1852.

1m

M. B. Hewson, Civil Engineer,
(Open to a New Engagement),
Memphis, Tenn.

To Car Builders and Railroad Companies.

The occupation of my time for some weeks past, in taking testimony to defend my rights, and the rights of the public against the "Combination," who are seeking to establish a monopoly, that they may extort their own prices for springs and other rubber goods, has prevented my noticing before two advertisements of F. M. Ray and associates, stating that some of my springs froze, but which have never returned, or proved to have been frozen, and the other denying that I obtained the premium of the American Institute, in October last, for the best car spring.

As an offset to that clumsy and transparent device, I submit the following, from Messrs. Lippincott & Miner, extensive Car Builders, of Mauch Chunk, Pa., one of my customers, who procured from me at the same time, and out of the same lot that Kimball & Gorton's were sent, six HUNDRED SPRINGS and used them in the coldest sections of that State. This I consider a sufficient answer to that manufactured certificate to break down individual energy and enterprise, and build up a vast monopoly.

"Mauch Chunk, Carbon Co., Pa.,
Feb. 20, 1852.

Mr. H. H. DAY:

Dear Sir—We have been using your make of Rubber Springs under the coal cars that we have been making this winter, and are satisfied that they are the BEST ARTICLES of the kind we have ever seen, and take pleasure in recommending them to those building railroad cars.

Yours respectfully,

LIPPINCOTT & MINER."

The fact that I am selling for fifty cents as good, if not better, springs, than the combination are charging seventy-five cents for, and that I now own the only original and genuine patent, will sufficiently explain to the Railroad public why they are resorting to such despicable means to prevent my Springs being tested, and their reputation established upon the different roads. I guarantee my Springs to stand all varieties of climate in the United States, and to wear as long as any other Rubber Spring in use on any of the roads in the Union.

I repeat to the public, that in October last, the American Institute awarded me the Premium for the best Car Spring after a fair test between mine and Ray's. By reference to the awards published by the Institute itself at that time, upon its own records, and in the papers in this city, this fact is established beyond dispute. By what process of legerdemain the New England Car Company may have procured the certificate they have published, I neither know nor care. The difference is this, my award was made to me at the time, and in the same public manner, all other awards of the American Institute were made and published under their own direction. The award of the New England Car Company, if any such exist, must have been procured within a few days past, in a manner and by means, that to say the least of it, surrounds it with suspicion and distrust.

HORACE H. DAY,
No. 23 Courtland street, N. Y.

Spikes, Spikes, Spikes.

ANY person wishing a simple and effective Spike Machine, or a number of them, may be supplied by addressing J. W. FLACK, Troy, N. Y.
or MOORE HARDAWAY, Richmond, Va.
March 6, 1850.

To Car Builders and Railroad Companies.

THE subscriber is now part owner of "Fuller's Patent India Rubber Car Springs," and cautions all persons interested of his determination to maintain his rights under this patent. Fuller's patent is the original, first, and only genuine patent. Extensive arrangements are made to supply the springs to car builders, railroad companies, and all who require the use of this patent.

The price is fixed at 50 cents per pound, including the privilege to use the patent.

The American Institute have just awarded the advertiser the first premium for best India rubber car springs.

Orders from any part of the United States, giving the exact size of the pieces of rubber required, will be promptly executed.

No other person has authority to make or vend the India rubber car springs, which operate by compression of the rubber.

HORACE H. DAY,

Oldest manufacturer of India rubber now in the business in the United States, and owner of nineteen India rubber patents. Warehouse 23 Courtland street, New York.

To Contractors.

THE CHESTER VALLEY RAILROAD COMPANY was incorporated by the State of Pennsylvania on the 19th of February, 1849, for the purpose of completing the road running from Norristown to Downingtown, a distance of about twenty-one miles. The road was commenced some years since, under the charter of the Norristown and Valley Railroad Company, and upwards of \$800,000 were expended in its construction; but owing to causes unnecessary to be enumerated, the company failed to complete the work within the time prescribed by law. On the application of the creditors of the company, the Legislature authorized the consolidation of the outstanding indebtedness of the former company into stock of the present company, which has been effected, and eleven thousand three hundred shares, at fifty dollars par, issued therefor; and authorized also the creation and sale of additional shares, as a preferred stock, to an amount, at the par value thereof, sufficient to complete the road—which latter stock is entitled to a dividend at the rate of eight per cent per annum from the time of payment, and before any dividend can be paid upon the consolidated stock.

Sealed Proposals will be received until the first day of April next, for the entire completion of said Railroad in conformity to a plan and specification which may be seen at the office of the President, at the Norristown Railroad depot, at Ninth and Green streets, Philadelphia, and detailed information will be furnished by the Engineer, W. H. Wilson, Esq., near Downingtown. The contractors are to furnish all necessary materials, to deliver the road to the company complete and ready for use, and to receive in payment the said preferred stock, or a portion of the same, and the residue in cash—the work to be commenced as soon as the claims for land damages, now in course of adjustment, shall have been settled—and to be completed within nine months thereafter. The form of the certificates of stock, together with a specification of the work required to be done, and all other necessary information will be furnished by the President of the company on application.

The position of this road, forming as it will, a new connecting link at Downingtown with the Pennsylvania Central railroad and its branches, and with the Reading, Germantown and Norristown roads, near Norristown, must render it one of the most profitable of railroad investments. It is impossible that the Pennsylvania Central railroad when completed to Pittsburgh, extended to St. Louis, and thus connected with other western railroads, can discharge by one outlet into Philadelphia, the accumulated treasures of the west. Commencing at Pittsburgh, the pressure on the Central road must be increased by the produce of every county through which it passes. When it is considered that even now the Columbus road is frequently overburdened, the result is apparent. The use of the Chester Valley road must become a physical necessity.—Without these considerations, the produce, etc., intended for the southern portions of Philadelphia County, would find the latter road the cheapest route. Add to this that it passes through a rich and highly cultivated country, teeming with the best products of a luxurious soil, that the lime necessary for agricultural purposes is manufactured by coal obtained from the Schuylkill regions, and that the coal thus required, and the lime thus manufactured, must be transported on this road; that the coal required for fuel in various portions of Delaware and Chester Counties, including Westchester, and at various points on the Columbia road west of Downingtown must be conveyed in the same manner, and that the marble which exists here in great abundance, and which to be productive must be delivered in large blocks, cannot be hauled in sufficient sizes on wagons, but may readily be conveyed by means of trucks on a railway. The completion of this road would also give rise to an increased number of iron, cotton and woolen manufactures, for which the Brandywine furnishes ample water power. The iron, including railroad iron, now being manufactured in the Schuylkill valley, which is sent west, via the Delaware river and Tide Water Canal, at great expense of freight, insurance, time, etc., would pass over the present road to Downingtown and thence to Colum-

bis, Harrisburg, etc. The lumber used along the Schuylkill and adjacent country, which is chiefly brought down the Susquehanna and the Delaware and Schuylkill rivers, would pass through Columbia and Downingtown over this road, and supply one of its largest items of tonnage. Nor is there any reason why, in the district of country lying between Downingtown and Norristown, dairy farms should not be cultivated to the same extent as along the New York and Erie railroad, and their produce find its way to market over the present road.

All these various sources of income have been critically and carefully examined, and the result leaves no doubt that the profits of the road would suffice to pay a dividend of eight per cent on the preferred stock, and an additional dividend of six per cent on the consolidated stock. It is therefore believed that an ample opportunity is now presented to contractors for a profitable employment of their capital. WM. E. MORRIS, President.

THOMAS B. TAYLOR, Secretary.
Philadelphia, January 12, 1852.

S. CULBERTSON & CO.,
12 BROADWAY, NEW YORK.
D. N. PICKERING,
BOSTON, MASS.,
PROPRIETORS AND MANUFACTURERS OF
DEVLAN'S PATENT LUBRICATING

O I L ,

Equally applicable to light and heavy Bearings,
Fast Speeds, etc.

This Oil, as a Lubricator, possesses the following advantages over all other Oils:

First, It runs machinery with less friction, thereby enabling Manufacturers, Steam Ships, Steamboat and Railroad Proprietors to accomplish more with the same motive power, and to save their machinery from unnecessary wear.

Second, It produces no Gum upon machinery, whereas all other Oils exhibit more or less. On machinery which is clean when it is introduced, it is warranted to run any length of time without showing any indications of gum.

Third, It will clean off any old gum that may have accumulated upon Slides and Journals from the use of bad Oils.

Fourth, As two gallons of this Oil will last as long as three of Sperm, and as it is thirty or forty cents a gallon cheaper, the consumer saves, by using it, at least fifty per cent, in cost.

PRICE \$1.00 PER GALLON.

It is now in use on the Baltimore & Ohio, Baltimore & Philadelphia, Susquehanna, Pennsylvania Central, Reading, New London, Willimantic & Palmer Railroads. Also, on numerous Steamers, and in various Manufactories.

Reading, Pa., July 12, 1850.

MR. P. S. DEVLAN, Patentee
of the Improved Lubricating Compound:

Dear Sir,—In answer to your favor of the 11th inst., asking our opinion of your Oil, I would reply: We have had your Patent Oil in use upon the Reading Railroad for some five months past, during which time we have used it on our locomotive cars and stationary machinery of every description to the amount of twelve thousand gallons. It has answered the purpose to our entire satisfaction, proving equal to the best Sperm Oil, in both lubricating and lasting qualities, and securing to us an economy in its use of Forty per cent, compared with the best Sperm Oil. It does not "gum" nor "choke," runs and feeds freely, and is as pure and clean, and free from sediment or deposit as the best Sperm Oil. We are at present using it everywhere on the road.

Yours, very respectfully, G. A. NICOLLS,
Engineer, etc., Reading Railroad.

Allaire Works, New York, June 23, 1851.

We are using Devlan's Patent Lubricating Oil upon all our machinery, both light and heavy, and find it better than any other. It is a most perfect lubricator, keeping the machinery clear and the journals cool. We have no doubt that it must come into general use in Manufactories and upon Steamships and Railroads, as it is worth more, gallon for gallon, than the best Sperm Oil, and is some 40 per cent. cheaper.

E. WINSHIP, Foreman Al're Works.
J. BREASTED, Manager Al're Works.

Steamship Southerner, New York, May 1, 1851.

Sirs,—I am using your Oil, exclusively, on the steamship Southerner, and consider it superior in every respect to any Oil I have ever used. I have had no heating of journals since I have been using it. I consume not more than two-thirds the quantity that I do of other Oils, and my machinery runs cleaner and with less friction than it ever run before. I intend using no other Oil in future, and cheerfully recommend it to others as the cheapest and best Machinery Oil they can buy.

HENRY FARMER,
Chief Engineer Steamship Southerner.

Philadelphia, April 4, 1849.

MR. P. S. DEVLAN:

Sir,—The Patent Oil you sent me to try, and which you design as a substitute for Sperm, has, I am happy to say, more than realized my expectations. I first had it fully tested on a locomotive engine for two days, by a skillful engineer, who assures me that it works equal to the best sperm Oil, with a saving in quantity of at least Fifty per cent. This saving, together with the greatly reduced price, at which you inform me you can furnish the article, recommends its use on Railroads, Mills and Factories, where large quantities of Oil are used. I have no doubt of its entire success, and under that impression tender you my sincere congratulations.

Truly yours, WILLIAM ENGLISH,
Sup't Columbia Railroad.

Philadelphia, Nov. 12, 1850.

I certify that Devlan's Patent Lubricating Compound, has been thoroughly tested upon the Philadelphia & Reading Railroad, and all its locomotive engines, cars, and stationary machinery, and that the reports of the same have been most favorable and satisfactory, showing it to be fully equal to the best Sperm Oil in its lubricating and lasting qualities.

JOHN TUCKER,

President Phila. & Reading Railroad Co.

Zinc Paint.

THE NEW JERSEY ZINC COMPANY having enlarged their works are prepared to offer their valuable Zinc Paints at greatly reduced prices.

Their White Paints which are now sold at for No. 1, 9 cents, for No. 2, 8 cents, and for No. 3, 7 cents, are much cheaper than any preparations of white lead, as they cover from 40 to 50 per cent more surface. These paints do not change color when exposed to bilge water, coal gas or sulphurous vapors; and as they dry much harder, are more easily kept clean than other paints.

The Brown and Black Zinc Paints are peculiarly adapted to all kinds of iron works. Being oxide of zinc, they galvanize the iron and preserve it more effectually than any other covering. These are sold at 5½ cents, at which price they are the cheapest paints for outside work, such as depots, station houses, machine shops, bridges, etc.

These paints dry rapidly, forming very hard surfaces, which resist the action of the weather much longer and are more nearly *Fire Proof* than any other paints.

MANNING & SQUIER. Agents,
Warehouse No. 45 Dey street,
Feb. 14. New York.

To Locomotive and Car Builders.

ST. LAWRENCE AND ATLANTIC RAILROAD COMPANY.

SEALED TENDERS, endorsed "Tenders for Locomotives," will be received at this Office, up to SATURDAY, the 3d April next, at noon, for the supply at Longueuil, of the following LOCOMOTIVE ENGINES, viz:

Nine Freight Engines of about 26 tons weight, with Tender—three to be delivered by the 1st November, 1852, and six to be delivered by the 15th August, 1853.

Four Passenger Engines, of about 23 tons weight, with Tender, to be delivered by the 15th August, 1853.

According to specifications to be seen at this Office after the 5th February next.

A. C. WEBSTER,
Secretary.

St. Lawrence and Atlantic
Railroad Company,
Montreal, 29d Jan., 1852.